ENGINEERING EXHIBIT
IN SUPPORT OF AN
APPLICATION FOR CONSTRUCTION PERMIT
WMVP(AM) – CHICAGO, ILLINOIS
1000 kHz – 50 kW DAY/37 kW NIGHT – DA-2-U
Facility ID: 73303

Applicant: Good Karma Broadcasting, L.L.C.

March, 2023

Consulting Engineers
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ENGINEERING STATEMENT OF CYNTHIA M. JACOBSON., P.E.

FIGURE NUMBER

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IN SUPPORT OF AN
APPLICATION FOR CONSTRUCTION PERMIT
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1000 kHz – 50 kW DAY/37 kW NIGHT – DA-2-U
FACILITY ID: 73303

Applicant: Good Karma Broadcasting, L.L.C.

I am a Radio Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia.

My education and experience are a matter of record with the Federal Communications Commission. I am a Registered Professional Engineer in the Commonwealth of Virginia, Registration No. 0402027914.

GENERAL

This office has been authorized by Good Karma Broadcasting, L.L.C. ("Good Karma"), licensee of Standard Broadcast Station WMVP, Chicago, Illinois, to prepare this statement, FCC Form 301 (Section III), and the attached engineering figures in support of an Application for Construction Permit to relocate the WMVP antenna system approximately 31 kilometers south to the licensed nighttime transmitter site of AM station WCPT.

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WMVP is a Class A station, currently operating on 1000 kHz with a power of 50.0 kilowatts during daytime hours and 50.0 kW during nighttime hours. The station operates during the day with a two-tower array and during the night with a three-tower array. The instant application proposes to collocate and diplex the WMVP transmission facilities at the nighttime transmitter site of AM station WCPT. WMVP proposes to operate a directional pattern during daytime hours at a power of 50.0 kW using two of the six towers at the WCPT site. During nighttime hours WMVP proposes to operate directionally at a power of 37.0 kW using four of the existing WCPT towers.

WCPT is licensed to Willow Springs, Illinois and operates on a frequency of 820 kHz, with a daytime power of 5.8 kW and a nighttime power of 1.5 kW. WCPT uses different sites for its daytime and nighttime operations. It is proposed herein to use the WCPT nighttime site. The WCPT nighttime antenna array consists of a total of six towers.

SITE AND SURROUNDING TERRAIN

The proposed antenna/transmitter location and surrounding terrain characteristics are contained the FCC's files for WCPT. The proposed center-of-array coordinates were re-determined to define the center-of-array for the WMVP two-tower daytime and the four-tower nighttime arrays. The NAD-27 coordinates are:

DAYTIME CENTER-OF-ARRAY

North Latitude:	41 – 32 – 32
West Longitude:	88 – 02 – 05

NIGHTTIME CENTER-OF-ARRAY
North Latitude: 41 – 32 – 29
West Longitude: 88 – 02 – 03

Figure 1 depicts an aerial view of the location of the towers to be used by WMVP in relation to the other towers at the WCPT site.

PROPOSED WMVP ANTENNA SYSTEM

The proposed WMVP antenna system consists of a total of four uniform cross-section, guyed towers that are 106.1 electrical degrees tall at the WMVP frequency of 1000 kHz. The proposed daytime directional horizontal plane radiation pattern is shown in the polar plot of Figure 2. The daytime horizontal fields are tabulated in Figure 3. Figure 4 contains a polar plot of the proposed nighttime directional horizontal plane radiation pattern. Contained in Figure 5 is a tabulation of the nighttime horizontal fields in mV/m at 1 kilometer. Figures 6 through 17 contain tabulations of the vertical fields of the proposed WMVP nighttime pattern.

GROUND SYSTEM

The existing ground system consists of 120, 91.0 meter (0.30 wavelength at the frequency of 1000 kHz), buried copper radials except where shortened due to property boundaries or where bonded to a transverse copper strap midway between adjacent towers.

FAA NOTIFICATION AND TOWER REGISTRATION

Since WMVP is proposing to utilize the existing towers of WCPT without physical alteration, it is believed that no further notification to the Federal Aviation Administration (FAA) is necessary. The FCC Antenna Registration Numbers are 1257923, 1257925, 1257926 and 1257929.

BLANKETING AND STATION INTERACTION

The WMVP proposed 1000 mV/m contours are shown on the map in Figure 18. The population within the predicted daytime and nighttime 1000 mV/m contours is greater than 300 persons. The population within the predicted daytime and nighttime 1000 mV/m contours is less than 1.0 percent of the population within the predicted daytime and nighttime 25 mV/m contours. See the table below.

CONTOUR OF INTEREST	NUMBER OF PERSONS	% OF PERSONS WITHIN THE 25 MV/M CONTOUR
Proposed Day 1000 mV/m	8,803	0.23
Proposed Night 1000 mV/m	7,256	0.20
Proposed Day 25 mV/m	3,835,324	N/A
Proposed Night 25 mV/m	3,687,640	N/A

The map of Figure 19 depicts the proposed predicted daytime and nighttime 25 mV/m contours. In response to all complaints of blanketing interference, WMVP will

undertake steps to mitigate the interference in accordance with the requirements of Section 73.88 of the FCC's Rules and Regulations.

The proposed WMVP/WCPT shared antenna site is located less than 3.2 kilometers from one other AM station, WJOL – 1340 kHz, Joliet, Illinois. There are three full-service FM stations and one FM translator station located within 10 kilometers of the proposed site. There are no TV stations located within 10 kilometers of the proposed site. It is expected that no detrimental interaction will occur with any other station as a result of the grant of the instant application. Filters will be installed for the nearby AM station to prevent any intermod emissions. Filter and detuning circuits will be installed to minimize any interaction with collocated station WCPT.

COVERAGE CONTOURS

The present and proposed daytime service contours are shown on the maps in Figures 20 and 21. The proposed daytime 5.0 mV/m contour will cover 100% of the population and the area of the city of license, Chicago, Illinois (see Figure 20). The present and proposed daytime 2.0 mV/m contours are shown on the map in Figure 21. The present and proposed daytime 0.5 mV/m contours are shown on the map in Figure 22.

The present and proposed nighttime service contours are shown on the map of Figure 24. The proposed nighttime interference-free contour is the 2.1 mV/m contour. In

the instance where the nighttime interference-free contour is less than a 5.0 mV/m, the 5.0 mV/m is considered to be the nighttime service contour. The proposed 5.0 mV/m nighttime contour will encompass 100% of the population and the area of the city of license. Because WMVP is an existing, licensed AM station, coverage of the city of license is not a requirement during nighttime hours for any proposed change to the nighttime facilities.

Section 73.24(i) of the FCC Rules is fully satisfied for both the proposed daytime and nighttime operations.

DAYTIME ALLOCATION STUDY

Eleven stations were considered in detail regarding the daytime allocation. These stations are:

WNAP	990 kHz	Muncie, IN;
WITZ	990 kHz	Jasper, IN;
WDEO	990 kHz	Ypsilanti, MI;
WCCD	1000 kHz	Parma, OH;
WHNY	1000 kHz	Paris TN;
WKVG	1000 kHz	Jenkins, KY;
KXEN	1010 kHz	St. Louis, MO;
WCSI	1010 kHz	Columbus, IN;

WPCN	1010 kHz	Stevens Point, WI;
KRNI	1010 kHz	Mason City, IA; and
WNVR	1030 kHz	Vernon Hills, IL.

Figure 23 depicts the daytime allocation study results for the above stations as they pertain to the present and proposed WMVP daytime operations. A further breakdown of the allocation study results by channel relationship follows along with corresponding maps depicting the pertinent contours. The distances to all groundwave contours were calculated using the equivalent distance method. Contours were calculated at 5 degree intervals using ground conductivity values shown on the FCC's M-3 soil map. Tabulations of distances to groundwave contours can be supplied upon request.

CO-CHANNEL DAYTIME STUDY

As depicted on the map in Figure 23A, there is existing overlap of the WMVP 0.1 mV/m protected contour with the 0.005 mV/m interfering contour of WHNY in a small area. The proposal will reduce this existing overlap received from WHNY. Neither the present nor the proposed 0.025 mV/m interfering contour of WMVP is predicted to overlap the 0.5 mV/m protected contour of WHNY.

As shown on the map in Figure 23A, there is no predicted overlap of the present or proposed WMVP 0.025 mV/m interfering contour with the 0.5 mV/m protected contours of stations WCCD and WKVG. Further, there is no predicted received overlap to the

present or proposed WMVP 0.1 mV/m protected contour from the 0.005 mV/m interfering contours of WCCD and WKVG.

FIRST ADJACENT CHANNEL DAYTIME STUDY

The contours on the map of Figure 23B show existing overlap between the present 0.25 mV/m interfering contour of WMVP and the 0.5 mV/m protected contour of first adjacent channel station WNAP. There exists a small area of overlap between the present 0.5 mV/m protected contour of WMVP and the 0.25 mV/m interfering contour of WNAP. The proposed WMVP daytime facility is predicted to result in an overall reduction in both the areas of contour overlap and the populations within those areas when compared to the licensed WMVP daytime facility with respect to station WNAP. The map of Figure 23B confirms there is no predicted prohibited contour overlap with respect to first adjacent channel stations WITZ, WCSI, WDEO, KXEN, WPCN and KRNI.

SECOND ADJACENT CHANNEL DAYTIME STUDY

There are no second adjacent stations within a distance that would warrant study.

THIRD ADJACENT CHANNEL DAYTIME STUDY

As demonstrated on the map of Figure 23C, there is no predicted prohibited overlap of the present or proposed WMVP 25 mV/m interfering/protected contours with the 25 mV/m protected/interfering contours of third adjacent channel station WNVR.

NIGHTTIME INTERFERENCE STUDY

Figure 26 contains a tabulation of the proposed RSS calculations for co-channel and first-adjacent channel stations that may be impacted by the instant proposal. Only those stations with margins less than 1000 mV/m are included in the tabulation. Based on the results from the nighttime allocation study, it is concluded that proposed nighttime facility of WMVP will not raise the 25% or 50% RSS limit of any domestic station or the 50% RSS limit of any foreign station. The proposed WMVP nighttime facility is compliant with all current domestic and international nighttime allocations standards.

In addition, the proposed 0.025 mV/m-10% skywave contour of WMVP will not overlap the 0.5 mV/m-50% skywave contour of domestic station KNWN, Seattle, Washington within the US land boundaries (see Figure 27). The present WMVP 0.025 mV/m-10% skywave contour overlaps the 0.5 mV/m-50% skywave contour of co-channel Mexican station XEOY within the land boundaries of Mexico. The proposed WMVP nighttime operation will reduce the amount of existing contour overlap with XEOY.

ENVIRONMENTAL IMPACT

The proposal described herein meets the criteria specified in Section 1.1306 of the Commission's Rules as an action which is categorically excluded from environmental processing. The proposal does not involve a site location specified under Section 1.1307(a)(1)-(7) of the Rules, nor high intensity lighting as specified under section 1.1307(a)(8).

RADIOFREQUENCY IMPACT

Effective January 1, 1986, the FCC amended its Rules to implement the National Environmental Policy Act (NEPA). This amendment established RF radiation protection guidelines to be used to determine if potentially harmful RF exposure is possible from an FCC-regulated facility. The guidelines that were adopted were those issued in 1982 by the American National Standards Institute (ANSI). The FCC has also issued OET Bulletin No. 65 entitled, "Evaluating Compliance with FCC–Specified Guidelines for Human Exposure to Radiofrequency Radiation" to aid in the radiation exposure analysis. This bulletin, based on the ANSI standard, as well as other current literature, provides detailed information for conducting an analysis including mathematical equations that can be used to determine compliance with the Commission's guidelines.

The proposed WMVP facility will be collocated with the 820 kHz operation of WCPT, thus the proposed site is considered a multiple-use site.

DETERMINATION OF COMPLIANCE WITH RADIO FREQUENCY ENERGY EXPOSURE LIMITS

WMVP proposes to operate with a nominal daytime power of 50.0 kW and a nighttime power of 37.0 kW (DA-2). WCPT is licensed to operate with a nominal daytime power of 5.8 kW and a nighttime power of 1.5 kW (DA-2). WCPT is a two site operation, therefore only the WCPT nighttime facility is of concern in the RFR calculations. The calculated power input to each tower at the site for each operating mode is tabulated below:

	Total System Power in kW	Power in Watts for ASR # 1257923	Power in Watts for ASR # 1257925	Power in Watts for ASR # 1257926	Power in Watts for ASR # 1257927	Power in Watts for ASR # 1257928	Power in Watts for ASR # 1257929
WMVP Pro Day	50.0	----	36,894.2	13,105.8	----	----	----
TOTAL DAY	**50.0**	----	**36,894.2**	**13,105.8**	----	----	----
WMVP Pro Night	37.0	6,374.3	24,028.0	6,766.9	----	----	-169.2
WCPT Night	1.5	42.4	723.4	321.8	232.6	252.4	-72.6
TOTAL NIGHT	**38.5**	**6,416.7**	**24,751.4**	**7,088.7**	**232.6**	**252.4**	**-241.8**

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The highest combined input power to any tower in any operating mode is 36,894.2 watts at the input to Tower #1 (ASR #1257925) for the proposed WMVP day and night operations.

Tables 2 and 3 of Supplement A to OET Bulletin 65 (Edition 97-01) provides compliance distances for tower heights of 0.25 wavelength to 0.5 wavelength. At WCPT's frequency of 820 kHz, the antenna height is 0.242 wavelength. At the proposed WMVP frequency of 1000 kHz, the antenna height is 0.295 wavelength.

A fence of no less than 3.4 meters (assuming worst case power of 36.9 kW using Tables 2 & 3) from the base of tower #1, ASR #1257925 would be compliant with the radio-frequency energy requirements of the FCC regarding the occupational/controlled and the general population/uncontrolled MPE limits.

Minimum restricted access distances were calculated using the same worst-case assumptions for the remaining towers that will be employed by the WMVP proposed facilities. For the ASR Towers #1257925 and # 1257926, the maximum power occurs during the daytime operating mode. For the ASR Towers #'s 1257923 and 1257929 the maximum power occurs during the nighttime operating mode.[1] A summary of the minimum necessary fencing requirements for compliance is as follows:

[1] RFR calculations were not performed for the towers that are not proposed for use by WMVP.

ASR #1257923: 2.0 meters

ASR #1257925: 3.4 meters

ASR #1257926: 2.2 meters

ASR #1257929: 2.0 meters

The existing fencing will be modified if necessary to meet the above minimum compliance distance for each tower. Each fence will be locked to preclude public access and appropriate warning signs will be installed on each fence.

It is submitted that the proposed WMVP operation at the WCPT site will not constitute a potential hazard to the quality of the human environment. Accordingly, the WMVP proposal, as described herein, should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Rules.

OCCUPATIONAL SAFETY

Access to the WMVP/WCPT tower bases will be restricted to authorized maintenance personnel only. During times when access is required within the fenced area, the licensees of WMVP and WCPT will develop joint procedures to reduce power, operate non-directionally from a different tower, or cease operation to ensure the safety of personnel and contractors entering the restricted area. Any existing procedures will be modified as necessary, to take into account the increased field levels resulting from the addition of the 1000 kHz facility, to ensure continued protection of personnel.

CONCLUSION

This statement, Section III of FCC Form 301 and the attached figures were prepared by me or under my direct supervision and are believed to be true and correct.

It is submitted that the proposed facility described herein complies with the technical standards of the Rules and Regulations of the Federal Communications Commission.

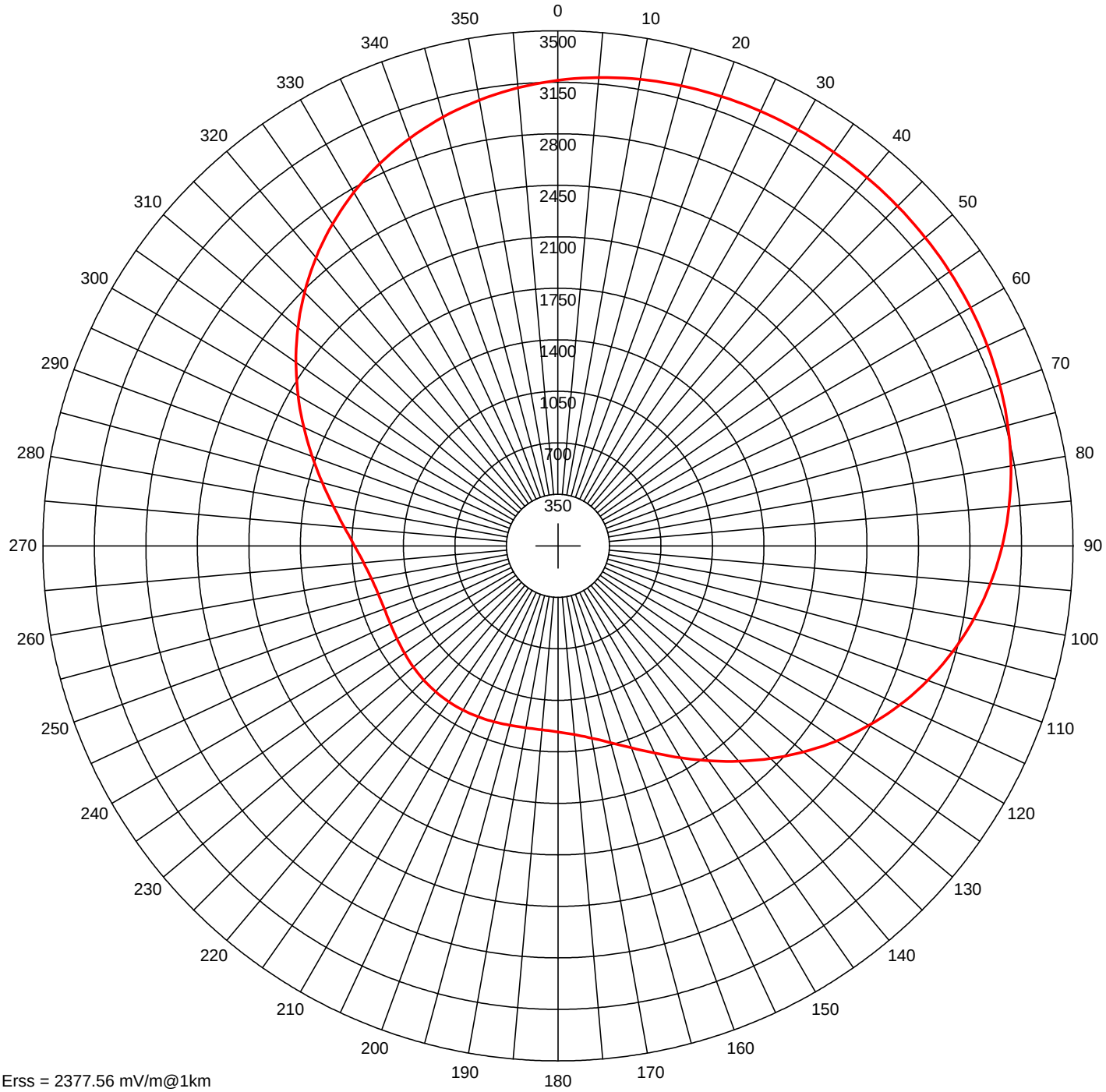
DATED: March 1, 2023

AERIAL VIEW OF TOWER LAYOUT

WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

Consulting Engineers CTJC CARL T. JONES CORPORATION

AM Directional Pattern



Erss = 2377.56 mV/m@1km
Theo RMS: 2259.1 mV/m@1km
Std RMS: 2373.2 mV/m@1km
Q: 70.711 mV/m@1km

Standard Horizontal Plane Pattern

Pattern (mV/m @ 1km)
Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	106.1	0	0	0.0	0.0	0.0	0.0
2	0.450	-105.0	87.0	37.6	106.1	0	0	0.0	0.0	0.0	0.0

PROPOSED DAYTIME STANDARD
HORIZONTAL PLANE RADIATION PATTERN
WMVP - CHICAGO, ILLINOIS
1320 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

Call: WMVPPRO
Freq: 1000 kHz
CHICAGO, IL, US
Hours: D
Lat: 41-32-32 N
Lng: 088-02-05 W
Power: 50.0 kW
Theo RMS: 2259.1 mV/m@1km
@ 50.0 kW

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FIGURE 3

DAYTIME HORIZONTAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	3012.0	3163.5	180	1202.4	1264.7
5	3041.7	3194.7	185	1193.3	1255.1
10	3064.6	3218.7	190	1193.7	1255.5
15	3081.7	3236.6	195	1200.1	1262.3
20	3094.1	3249.6	200	1209.3	1271.9
25	3102.6	3258.5	205	1218.6	1281.7
30	3107.8	3264.1	210	1226.0	1289.4
35	3110.3	3266.7	215	1230.1	1293.7
40	3110.4	3266.8	220	1230.2	1293.8
45	3108.0	3264.2	225	1226.2	1289.7
50	3102.8	3258.8	230	1219.0	1282.1
55	3094.5	3250.1	235	1209.7	1272.3
60	3082.3	3237.3	240	1200.4	1262.6
65	3065.4	3219.5	245	1193.8	1255.7
70	3042.7	3195.7	250	1193.1	1255.0
75	3013.4	3164.9	255	1201.8	1264.1
80	2976.2	3125.8	260	1223.2	1286.5
85	2930.1	3077.5	265	1260.2	1325.3
90	2874.4	3019.0	270	1314.4	1382.2
95	2808.3	2949.7	275	1386.2	1457.4
100	2731.5	2869.0	280	1474.5	1550.0
105	2643.9	2777.1	285	1577.1	1657.6
110	2546.0	2674.3	290	1691.2	1777.3
115	2438.5	2561.5	295	1813.3	1905.5
120	2322.7	2440.0	300	1940.2	2038.6
125	2200.4	2311.6	305	2068.6	2173.3
130	2073.7	2178.7	310	2195.4	2306.3
135	1945.4	2044.0	315	2317.9	2434.9
140	1818.4	1910.7	320	2434.0	2556.8
145	1695.9	1782.3	325	2541.9	2670.0
150	1581.5	1662.2	330	2640.2	2773.2
155	1478.3	1554.0	335	2728.2	2865.6
160	1389.4	1460.8	340	2805.5	2946.7
165	1317.0	1384.8	345	2872.0	3016.5
170	1262.1	1327.2	350	2928.1	3075.4
175	1224.4	1287.8	355	2974.5	3124.1

Fields in mV/m @ 1 Kilometer

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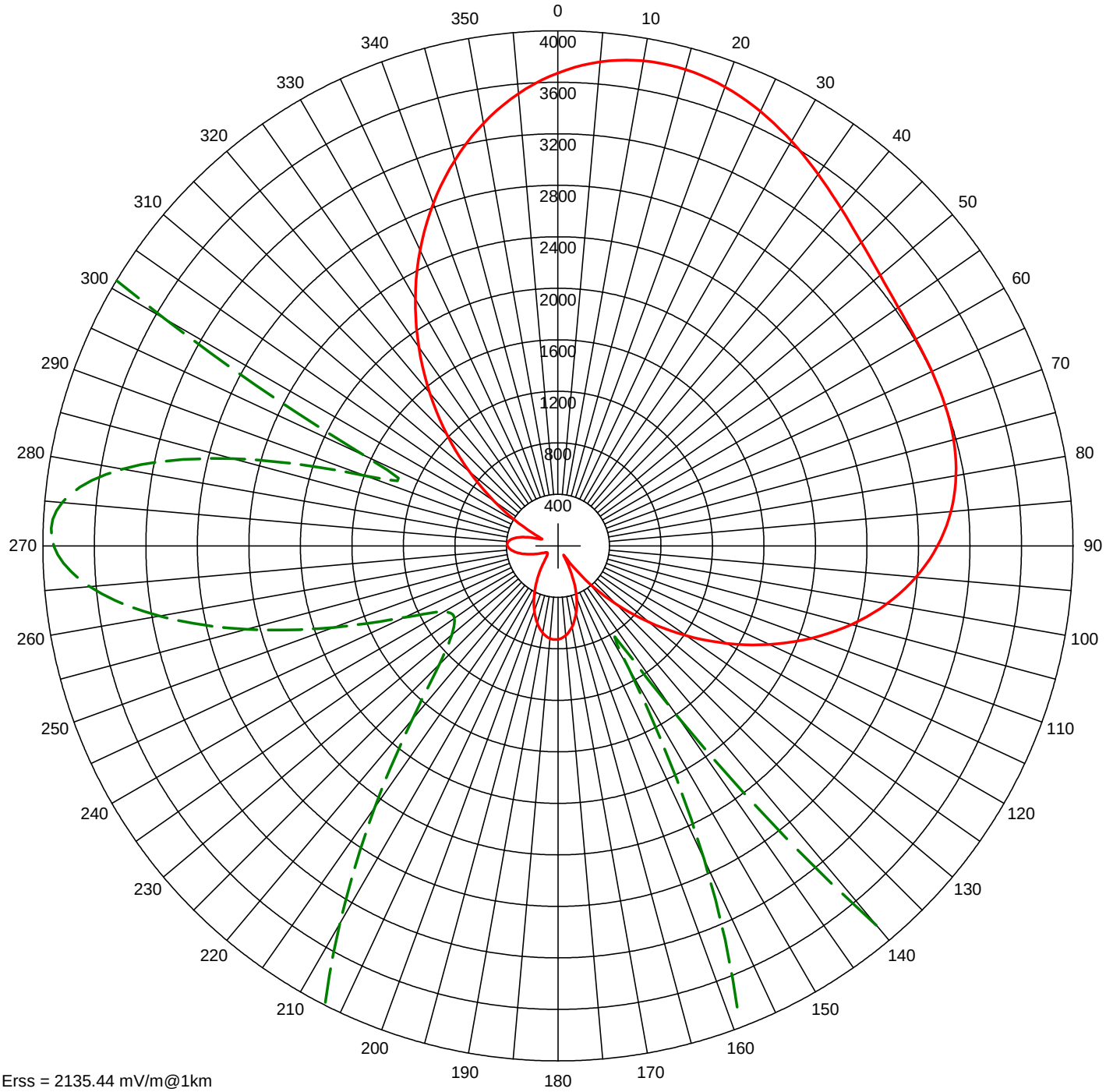
AM Directional Pattern



Erss = 2135.44 mV/m@1km
Theo RMS: 2015.3 mV/m@1km
Std RMS: 2117.0mV/m@1km
Q: 60.828 mV/m@1km

Standard Horizontal Plane Pattern

Pattern (mV/m @ 1km)
Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.349	-102.0	113.7	36.9	106.1	0	0	0.0	0.0	0.0	0.0
2	0.754	-227.6	200.7	37.2	106.1	0	0	0.0	0.0	0.0	0.0
3	1.000	0.0	0.0	0.0	106.1	0	0	0.0	0.0	0.0	0.0
4	0.283	-2.6	241.5	98.5	106.1	0	0	0.0	0.0	0.0	0.0

PROPOSED NIGHTTIME STANDARD
HORIZONTAL PLANE RADIATION PATTERN
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

Call: WMVPPRO
Freq: 1000 kHz
CHICAGO, IL, US
Hours: N
Lat: 41-32-29 N [NAD27]
Lng: 088-02-03 W
Power: 37.0 kW
Theo RMS: 2015.3 mV/m@1km
@ 37.0 kW

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FIGURE 5

NIGHTTIME HORIZONTAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	3496.8	3672.2	180	689.3	726.6
5	3592.2	3772.4	185	684.6	721.7
10	3641.5	3824.1	190	649.7	685.2
15	3646.4	3829.3	195	588.4	621.1
20	3611.5	3792.6	200	506.7	535.9
25	3544.2	3722.0	205	412.9	438.3
30	3454.7	3628.0	210	316.6	338.5
35	3354.8	3523.1	215	227.8	247.5
40	3257.3	3420.8	220	156.1	175.9
45	3173.6	3332.9	225	108.2	130.3
50	3111.4	3267.6	230	82.6	107.7
55	3073.4	3227.7	235	71.1	98.2
60	3056.1	3209.5	240	76.4	102.6
65	3050.9	3204.1	245	109.9	131.9
70	3046.1	3199.0	250	165.6	185.2
75	3029.2	3181.3	255	230.6	250.4
80	2989.0	3139.1	260	292.9	314.1
85	2916.7	3063.2	265	341.9	364.6
90	2807.0	2948.1	270	368.0	391.6
95	2657.7	2791.3	275	363.0	386.5
100	2469.9	2594.2	280	321.4	343.4
105	2247.4	2360.6	285	241.6	261.6
110	1996.4	2097.2	290	138.6	158.9
115	1724.9	1812.2	295	145.4	165.5
120	1441.6	1515.0	300	330.1	352.4
125	1155.6	1215.1	305	575.1	607.2
130	875.5	921.5	310	854.2	899.2
135	608.7	642.3	315	1156.5	1216.0
140	361.4	384.8	320	1472.3	1547.2
145	141.0	161.2	325	1792.5	1883.2
150	85.6	110.3	330	2108.2	2214.6
155	249.2	269.3	335	2411.3	2532.7
160	394.8	419.4	340	2694.2	2829.6
165	513.4	542.9	345	2949.9	3098.0
170	603.1	636.5	350	3172.2	3331.4
175	662.1	698.1	355	3355.9	3524.3

Fields in mV/m @ 1 Kilometer

FIGURE 6

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 5 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	3469.8	3643.8	180	687.1	724.2
5	3564.5	3743.3	185	683.0	719.9
10	3613.6	3794.8	190	649.0	684.4
15	3618.8	3800.2	195	589.0	621.7
20	3584.6	3764.3	200	508.9	538.1
25	3518.3	3694.8	205	416.9	442.3
30	3429.9	3602.0	210	322.1	344.1
35	3331.2	3498.4	215	234.3	254.0
40	3234.7	3397.0	220	162.3	181.8
45	3151.4	3309.6	225	111.7	133.4
50	3089.2	3244.2	230	81.1	106.2
55	3050.5	3203.7	235	64.6	92.9
60	3032.1	3184.4	240	68.3	95.8
65	3025.6	3177.5	245	103.6	125.9
70	3019.5	3171.1	250	160.5	180.1
75	3001.6	3152.3	255	225.5	245.1
80	2960.7	3109.4	260	287.1	308.1
85	2888.4	3033.5	265	335.2	357.6
90	2779.2	2918.9	270	360.3	383.6
95	2631.0	2763.3	275	354.7	377.8
100	2444.9	2567.9	280	312.9	334.6
105	2224.6	2336.7	285	233.4	253.2
110	1976.2	2076.0	290	132.2	152.7
115	1707.5	1794.0	295	146.7	166.6
120	1427.1	1499.8	300	332.3	354.7
125	1144.0	1202.8	305	575.5	607.6
130	866.5	912.1	310	852.1	897.0
135	602.1	635.4	315	1151.5	1210.7
140	356.9	380.0	320	1464.2	1538.7
145	138.2	158.4	325	1781.3	1871.4
150	86.1	110.5	330	2094.0	2199.6
155	249.1	269.1	335	2394.2	2514.7
160	393.8	418.4	340	2674.4	2808.9
165	511.8	541.1	345	2927.8	3074.8
170	600.9	634.2	350	3148.1	3306.1
175	659.8	695.6	355	3330.1	3497.2

Fields in mV/m @ 1 Kilometer

FIGURE 7

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 10 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	3389.7	3559.7	180	680.4	717.1
5	3482.3	3656.9	185	677.8	714.4
10	3530.7	3707.7	190	646.6	681.8
15	3536.6	3714.0	195	590.4	623.0
20	3504.5	3680.2	200	515.0	544.3
25	3441.2	3613.8	205	427.9	453.6
30	3356.3	3524.7	210	337.7	360.0
35	3261.0	3424.7	215	252.9	272.7
40	3167.2	3326.1	220	180.7	199.6
45	3085.4	3240.2	225	124.5	144.8
50	3023.0	3174.7	230	82.2	106.5
55	2982.6	3132.3	235	49.9	81.4
60	2961.1	3109.8	240	44.9	78.1
65	2950.8	3099.0	245	86.2	109.9
70	2940.9	3088.6	250	146.3	165.7
75	2919.9	3066.6	255	210.7	229.8
80	2877.3	3021.8	260	270.1	290.3
85	2804.7	2945.6	265	315.3	336.8
90	2697.1	2832.6	270	337.8	360.1
95	2552.3	2680.6	275	330.4	352.4
100	2371.1	2490.5	280	287.9	308.6
105	2157.3	2266.0	285	209.5	228.7
110	1916.5	2013.3	290	114.5	135.4
115	1656.0	1740.0	295	152.1	171.4
120	1384.2	1454.8	300	339.2	361.6
125	1109.5	1166.7	305	576.8	608.8
130	840.0	884.2	310	845.9	890.3
135	582.7	615.0	315	1136.7	1195.1
140	343.6	366.1	320	1440.3	1513.6
145	130.1	150.1	325	1748.2	1836.7
150	87.7	111.2	330	2051.9	2155.4
155	248.6	268.3	335	2343.6	2461.6
160	390.7	415.0	340	2615.9	2747.4
165	506.6	535.6	345	2862.2	3005.9
170	594.4	627.2	350	3076.4	3230.9
175	652.6	688.0	355	3253.6	3416.9

Fields in mV/m @ 1 Kilometer

FIGURE 8

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 15 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	3259.3	3422.7	180	668.7	704.7
5	3348.2	3516.2	185	668.6	704.6
10	3395.5	3565.7	190	641.7	676.5
15	3402.6	3573.2	195	591.6	624.1
20	3373.6	3542.8	200	523.4	552.9
25	3315.1	3481.3	205	443.9	470.0
30	3235.7	3398.0	210	360.7	383.5
35	3145.9	3303.7	215	280.9	301.0
40	3056.4	3209.8	220	209.8	228.4
45	2977.0	3126.4	225	149.6	168.2
50	2914.5	3060.9	230	97.7	119.0
55	2871.5	3015.7	235	48.5	78.9
60	2845.4	2988.3	240	8.9	61.0
65	2829.4	2971.4	245	63.6	89.9
70	2813.8	2955.1	250	126.0	145.4
75	2788.1	2928.1	255	188.1	206.5
80	2742.6	2880.4	260	243.1	262.2
85	2669.8	2804.0	265	283.4	303.6
90	2564.7	2693.7	270	301.6	322.4
95	2425.3	2547.3	275	291.3	311.7
100	2252.2	2365.6	280	248.0	267.3
105	2048.7	2152.0	285	171.8	190.2
110	1820.1	1912.0	290	91.0	113.0
115	1572.9	1652.6	295	165.3	183.7
120	1314.8	1381.9	300	351.3	373.7
125	1053.7	1108.1	305	579.2	611.1
130	797.0	839.1	310	835.8	879.7
135	551.4	582.1	315	1112.6	1169.8
140	322.4	343.8	320	1401.6	1472.9
145	117.5	137.3	325	1694.5	1780.3
150	90.7	112.7	330	1983.6	2083.7
155	247.4	266.7	335	2261.4	2375.2
160	385.1	408.8	340	2520.8	2647.5
165	497.5	525.8	345	2755.5	2893.9
170	582.9	615.0	350	2959.9	3108.5
175	640.2	674.9	355	3129.0	3286.0

Fields in mV/m @ 1 Kilometer

FIGURE 9

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 20 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	3082.9	3237.5	180	651.3	686.3
5	3166.9	3325.7	185	654.4	689.5
10	3212.4	3373.5	190	633.1	667.3
15	3220.8	3382.3	195	590.6	622.8
20	3195.9	3356.2	200	531.5	561.0
25	3143.4	3301.1	205	461.6	488.1
30	3071.2	3225.3	210	387.2	410.6
35	2988.6	3138.5	215	314.0	334.7
40	2904.9	3050.7	220	246.3	265.0
45	2828.9	2970.9	225	185.6	203.2
50	2766.7	2905.6	230	130.6	148.8
55	2720.7	2857.3	235	79.1	101.1
60	2689.1	2824.1	240	36.2	69.0
65	2666.0	2799.9	245	52.4	79.7
70	2643.4	2776.2	250	105.9	125.2
75	2612.0	2743.2	255	160.8	178.4
80	2563.2	2692.0	260	208.3	226.2
85	2490.3	2615.4	265	241.5	260.1
90	2388.7	2508.8	270	253.9	272.8
95	2256.4	2369.9	275	239.9	258.4
100	2094.0	2199.4	280	196.0	213.7
105	1904.1	2000.2	285	124.2	142.6
110	1691.4	1776.9	290	77.0	99.3
115	1461.8	1535.9	295	188.5	206.1
120	1222.0	1284.3	300	368.3	391.0
125	978.9	1029.5	305	582.5	614.3
130	739.4	778.5	310	822.2	865.2
135	509.4	538.0	315	1080.2	1135.7
140	294.3	314.4	320	1349.3	1418.0
145	101.6	121.3	325	1622.2	1704.2
150	94.8	115.1	330	1891.5	1986.9
155	244.8	263.5	335	2150.4	2258.7
160	376.2	399.1	340	2392.4	2512.7
165	483.7	511.1	345	2611.5	2742.7
170	565.9	597.0	350	2802.4	2943.1
175	621.9	655.6	355	2960.7	3109.2

Fields in mV/m @ 1 Kilometer

FIGURE 10

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 25 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	2866.5	3010.3	180	627.2	660.8
5	2944.4	3092.1	185	634.0	667.9
10	2987.5	3137.3	190	618.9	652.2
15	2997.2	3147.5	195	584.9	616.6
20	2976.7	3126.1	200	535.9	565.4
25	2931.3	3078.3	205	476.7	503.5
30	2867.4	3011.3	210	412.3	436.3
35	2793.1	2933.3	215	347.2	368.6
40	2716.5	2852.8	220	284.9	304.0
45	2644.8	2777.6	225	226.8	244.3
50	2583.5	2713.2	230	173.3	190.0
55	2534.8	2662.1	235	124.6	141.7
60	2497.6	2623.0	240	85.2	104.7
65	2467.2	2591.1	245	72.1	93.2
70	2437.1	2559.5	250	95.9	114.5
75	2399.5	2520.1	255	134.2	151.1
80	2347.4	2465.3	260	169.7	186.3
85	2274.7	2389.0	265	193.2	210.0
90	2177.4	2287.0	270	198.4	215.3
95	2053.8	2157.2	275	180.3	197.0
100	1904.0	2000.0	280	136.6	153.4
105	1730.4	1817.7	285	76.1	96.7
110	1536.6	1614.4	290	93.6	112.3
115	1327.9	1395.3	295	220.9	238.3
120	1109.8	1166.5	300	389.2	412.3
125	888.4	934.5	305	585.9	617.6
130	669.7	705.3	310	804.9	846.9
135	459.0	485.0	315	1040.0	1093.4
140	261.1	279.5	320	1285.0	1350.4
145	84.6	104.1	325	1533.4	1611.0
150	99.8	118.0	330	1778.7	1868.4
155	240.2	258.0	335	2014.5	2116.0
160	363.3	385.3	340	2235.1	2347.5
165	464.6	490.8	345	2435.0	2557.4
170	542.7	572.4	350	2609.4	2740.4
175	597.0	629.2	355	2754.3	2892.5

Fields in mV/m @ 1 Kilometer

FIGURE 11

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 30 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	2617.6	2748.9	180	595.6	627.4
5	2688.1	2823.0	185	605.9	638.2
10	2728.2	2865.0	190	597.3	629.2
15	2738.9	2876.3	195	572.0	602.7
20	2723.1	2859.7	200	533.4	562.3
25	2685.0	2819.7	205	485.1	511.9
30	2630.1	2762.1	210	431.2	455.6
35	2565.0	2693.7	215	375.1	397.1
40	2496.2	2621.5	220	319.7	339.5
45	2429.8	2551.8	225	266.6	284.5
50	2370.3	2489.4	230	216.9	233.3
55	2319.8	2436.3	235	171.5	187.0
60	2277.6	2392.0	240	133.2	148.8
65	2240.5	2353.1	245	108.4	124.6
70	2203.3	2314.1	250	104.0	120.4
75	2160.1	2268.7	255	116.8	132.7
80	2105.1	2210.9	260	134.0	149.6
85	2033.2	2135.5	265	144.5	160.0
90	1941.2	2038.9	270	141.0	156.5
95	1827.3	1919.3	275	119.2	135.1
100	1691.6	1776.9	280	80.3	98.3
105	1535.9	1613.5	285	61.2	81.8
110	1363.1	1432.2	290	135.4	151.0
115	1177.4	1237.4	295	258.8	276.4
120	983.6	1034.0	300	411.5	435.0
125	786.5	827.4	305	587.8	619.3
130	591.3	623.0	310	783.1	823.8
135	402.6	425.8	315	992.3	1043.1
140	225.0	241.6	320	1210.0	1271.5
145	69.1	88.5	325	1430.6	1502.9
150	104.8	121.1	330	1648.4	1731.6
155	232.9	249.7	335	1858.0	1951.6
160	345.8	366.6	340	2054.2	2157.5
165	439.5	464.3	345	2232.1	2344.2
170	512.7	540.7	350	2387.5	2507.4
175	564.7	595.1	355	2516.9	2643.2

Fields in mV/m @ 1 Kilometer

FIGURE 12

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 35 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	2344.5	2462.2	180	555.5	585.2
5	2406.8	2527.6	185	569.1	599.3
10	2443.2	2565.8	190	566.4	596.5
15	2454.5	2577.7	195	549.4	578.7
20	2443.1	2565.7	200	520.7	548.7
25	2412.3	2533.3	205	483.1	509.4
30	2366.4	2485.2	210	439.6	463.9
35	2310.7	2426.7	215	393.0	415.3
40	2250.4	2363.4	220	345.5	365.8
45	2190.1	2300.1	225	298.8	317.2
50	2133.5	2240.7	230	254.1	270.8
55	2082.5	2187.2	235	212.5	227.9
60	2036.9	2139.3	240	175.7	190.3
65	1994.5	2094.8	245	146.1	160.4
70	1951.7	2049.8	250	126.3	140.6
75	1904.0	1999.8	255	116.6	131.0
80	1847.1	1940.0	260	112.7	127.2
85	1777.0	1866.4	265	107.5	122.2
90	1691.0	1776.1	270	95.3	110.4
95	1587.6	1667.7	275	74.9	91.5
100	1466.9	1541.0	280	63.5	81.4
105	1330.0	1397.3	285	102.1	117.0
110	1179.2	1239.1	290	185.3	200.0
115	1017.8	1069.7	295	297.0	315.3
120	849.5	893.1	300	431.7	455.7
125	678.3	713.7	305	585.8	616.8
130	508.3	535.8	310	755.5	794.7
135	343.7	363.8	315	936.8	984.8
140	188.8	203.6	320	1125.2	1182.4
145	59.8	78.2	325	1315.9	1382.5
150	109.3	123.8	330	1504.2	1580.1
155	222.4	238.1	335	1685.4	1770.3
160	323.5	342.9	340	1855.1	1948.4
165	408.3	431.2	345	2009.1	2110.1
170	475.5	501.4	350	2143.9	2251.6
175	524.6	552.8	355	2256.5	2369.7

Fields in mV/m @ 1 Kilometer

FIGURE 13

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 40 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	2056.4	2159.6	180	507.1	534.1
5	2109.9	2215.8	185	522.9	550.7
10	2142.0	2249.4	190	525.2	553.1
15	2153.3	2261.4	195	515.6	543.0
20	2145.7	2253.4	200	495.8	522.3
25	2121.7	2228.1	205	468.1	493.3
30	2084.5	2189.2	210	434.5	458.2
35	2038.2	2140.5	215	397.3	419.3
40	1986.4	2086.2	220	358.2	378.5
45	1933.0	2030.1	225	318.7	337.3
50	1880.6	1975.0	230	279.9	296.9
55	1830.8	1922.8	235	242.9	258.6
60	1783.7	1873.4	240	208.8	223.3
65	1738.2	1825.7	245	178.6	192.2
70	1691.9	1777.0	250	153.1	166.3
75	1641.6	1724.2	255	132.5	145.5
80	1584.3	1664.1	260	115.7	128.6
85	1517.2	1593.6	265	100.8	114.0
90	1438.0	1510.5	270	88.0	101.7
95	1345.8	1413.7	275	84.7	98.5
100	1240.3	1303.0	280	105.7	118.7
105	1122.4	1179.2	285	156.7	169.9
110	993.7	1044.2	290	233.1	248.4
115	856.7	900.5	295	330.5	349.6
120	714.2	751.1	300	446.0	470.2
125	569.3	599.3	305	577.0	607.3
130	425.5	448.8	310	720.5	757.7
135	286.2	303.5	315	873.2	917.9
140	156.4	169.5	320	1031.6	1084.0
145	61.0	76.7	325	1191.6	1251.9
150	113.0	126.0	330	1349.6	1417.7
155	208.9	223.4	335	1501.6	1577.2
160	296.6	314.3	340	1643.9	1726.6
165	371.3	392.2	345	1773.3	1862.4
170	431.5	455.1	350	1886.7	1981.4
175	476.8	502.4	355	1981.6	2081.1

Fields in mV/m @ 1 Kilometer

FIGURE 14

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 45 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	1762.5	1851.0	180	451.0	475.1
5	1807.0	1897.7	185	468.0	492.8
10	1834.3	1926.4	190	474.1	499.2
15	1845.1	1937.7	195	470.4	495.4
20	1840.5	1932.9	200	458.3	482.7
25	1822.5	1914.0	205	439.1	462.7
30	1793.3	1883.4	210	414.7	437.1
35	1755.8	1844.0	215	386.4	407.5
40	1712.7	1798.7	220	355.7	375.3
45	1666.5	1750.3	225	323.7	342.0
50	1619.4	1700.8	230	291.6	308.5
55	1572.7	1651.7	235	260.1	275.7
60	1526.6	1603.4	240	230.2	244.6
65	1480.6	1555.1	245	202.4	215.9
70	1433.3	1505.5	250	177.4	190.1
75	1382.8	1452.5	255	155.6	167.7
80	1327.1	1394.0	260	137.5	149.2
85	1264.3	1328.1	265	124.4	136.0
90	1193.0	1253.2	270	119.8	131.4
95	1112.2	1168.4	275	129.4	141.0
100	1021.8	1073.6	280	158.0	170.2
105	922.5	969.4	285	206.3	219.9
110	815.3	856.9	290	272.6	288.7
115	702.0	738.1	295	354.8	374.4
120	584.7	615.1	300	450.9	475.0
125	465.9	490.6	305	559.0	588.1
130	348.1	367.5	310	676.6	711.4
135	234.9	249.5	315	801.2	842.1
140	132.6	144.3	320	929.9	977.2
145	72.2	84.7	325	1059.9	1113.5
150	116.5	128.0	330	1188.0	1247.9
155	193.2	206.3	335	1311.2	1377.2
160	266.2	282.0	340	1426.6	1498.4
165	329.7	348.2	345	1531.5	1608.5
170	382.0	402.9	350	1623.7	1705.3
175	422.4	445.2	355	1701.2	1786.6

Fields in mV/m @ 1 Kilometer

FIGURE 15

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 50 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	1472.1	1546.0	180	389.3	410.1
5	1507.6	1583.3	185	406.1	427.7
10	1530.0	1606.8	190	414.6	436.6
15	1539.6	1616.9	195	415.3	437.3
20	1537.3	1614.5	200	409.2	430.9
25	1524.2	1600.8	205	397.3	418.5
30	1502.1	1577.5	210	380.7	401.1
35	1472.6	1546.6	215	360.5	380.0
40	1437.7	1510.0	220	337.7	356.2
45	1399.2	1469.5	225	313.4	330.7
50	1358.5	1426.8	230	288.2	304.5
55	1316.5	1382.7	235	263.1	278.3
60	1273.7	1337.8	240	238.8	252.9
65	1229.9	1291.8	245	215.8	229.1
70	1184.5	1244.2	250	195.0	207.5
75	1136.4	1193.7	255	177.3	189.1
80	1084.5	1139.2	260	163.9	175.3
85	1027.7	1079.6	265	156.9	168.1
90	965.0	1013.8	270	159.2	170.5
95	895.9	941.3	275	173.7	185.4
100	820.4	862.1	280	202.0	214.7
105	738.9	776.6	285	244.2	258.6
110	652.1	685.5	290	299.4	316.1
115	561.2	590.2	295	366.4	386.1
120	467.9	492.4	300	443.6	467.0
125	373.9	394.0	305	529.6	557.1
130	281.7	297.7	310	622.6	654.6
135	194.9	207.3	315	720.6	757.4
140	121.5	131.9	320	821.5	863.2
145	88.6	98.8	325	923.1	969.8
150	120.2	130.5	330	1023.0	1074.7
155	176.8	188.6	335	1119.0	1175.4
160	234.0	247.9	340	1208.9	1269.8
165	285.4	301.5	345	1290.8	1355.7
170	328.8	346.9	350	1362.8	1431.4
175	363.6	383.2	355	1423.6	1495.2

Fields in mV/m @ 1 Kilometer

FIGURE 16

NIGHTTIME VERTICAL FIELDS

WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 55 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	1193.5	1253.5	180	325.0	342.4
5	1220.5	1281.9	185	340.4	358.6
10	1238.0	1300.2	190	349.6	368.3
15	1246.0	1308.7	195	353.1	371.9
20	1245.1	1307.7	200	351.4	370.1
25	1236.0	1298.2	205	345.2	363.6
30	1219.8	1281.1	210	335.1	353.0
35	1197.5	1257.7	215	321.9	339.3
40	1170.3	1229.2	220	306.4	323.0
45	1139.4	1196.7	225	289.3	305.2
50	1105.7	1161.3	230	271.3	286.3
55	1069.9	1123.8	235	253.0	267.2
60	1032.4	1084.4	240	235.2	248.6
65	993.4	1043.4	245	218.5	231.3
70	952.5	1000.5	250	203.9	216.0
75	909.3	955.2	255	192.2	203.9
80	863.4	907.0	260	185.0	196.4
85	814.1	855.3	265	183.9	195.2
90	761.1	799.7	270	190.4	202.0
95	704.1	739.8	275	206.0	218.3
100	643.0	675.8	280	231.4	244.7
105	578.3	607.9	285	266.4	281.2
110	510.4	536.7	290	310.5	327.4
115	440.3	463.2	295	362.9	382.1
120	369.2	388.7	300	422.5	444.5
125	298.6	314.9	305	488.1	513.3
130	230.8	244.0	310	558.5	587.2
135	169.5	180.3	315	632.3	664.6
140	122.8	132.1	320	708.0	743.9
145	105.7	114.7	325	783.8	823.5
150	124.4	133.8	330	858.3	901.7
155	161.6	172.1	335	929.8	976.7
160	202.6	214.7	340	996.7	1046.9
165	241.2	254.9	345	1057.7	1110.9
170	275.1	290.3	350	1111.4	1167.3
175	303.2	319.7	355	1156.9	1215.1

Fields in mV/m @ 1 Kilometer

FIGURE 17

NIGHTTIME VERTICAL FIELDS

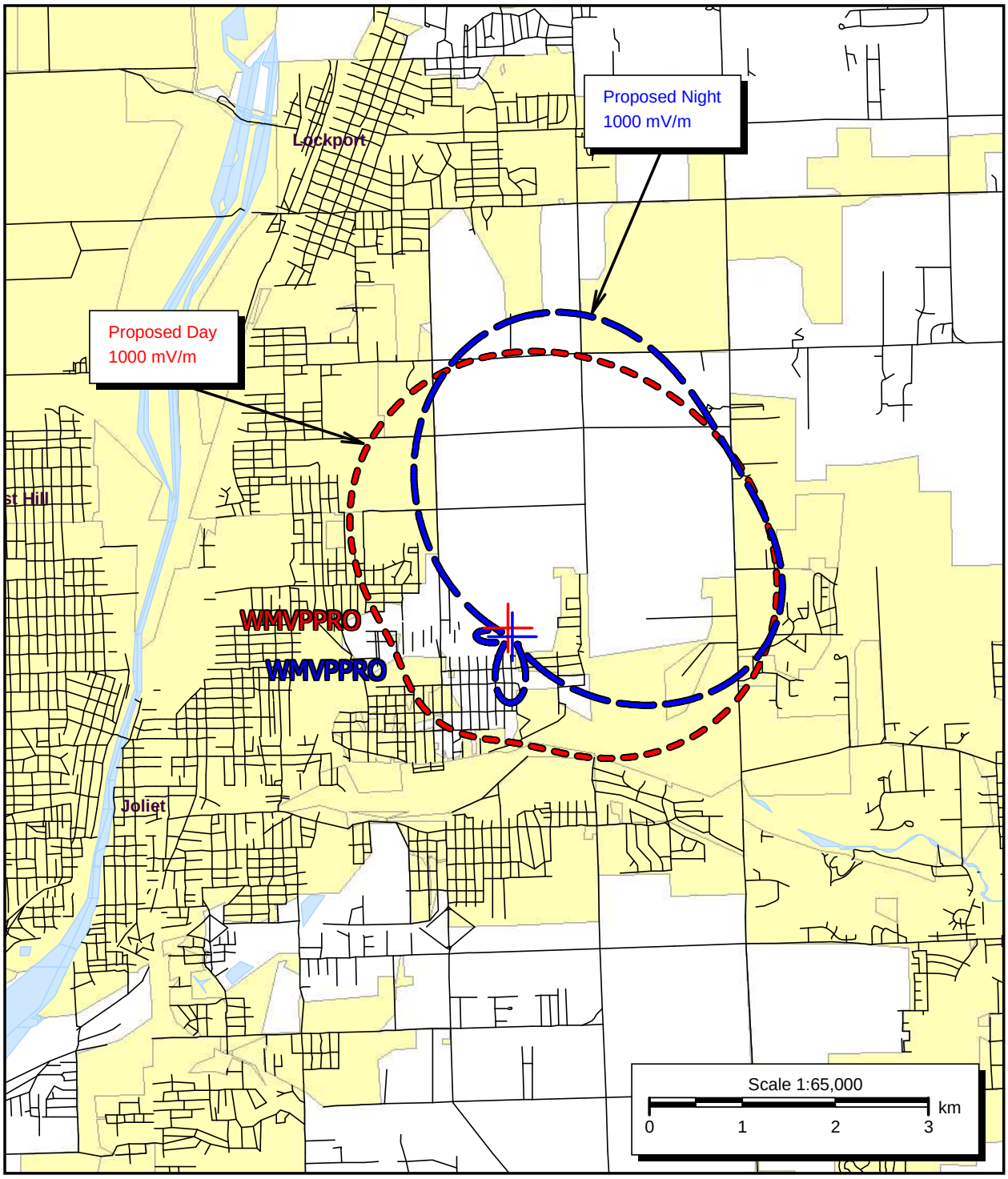
WMVP - CHICAGO, IL
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2

VERTICAL ANGLE 60 DEGREES

AZIMUTH D(DEGREES)	E THEO. (mV/m)	E STD. (mV/m)	AZIMUTH (DEGREES)	E THEO. (mV/m)	E STD. (mV/m)
0	934.1	981.1	180	262.2	276.4
5	953.5	1001.5	185	275.0	289.8
10	966.3	1014.9	190	283.7	298.9
15	972.5	1021.4	195	288.4	303.8
20	972.3	1021.3	200	289.5	305.0
25	966.3	1014.9	205	287.3	302.7
30	954.8	1002.8	210	282.2	297.4
35	938.6	985.9	215	274.8	289.6
40	918.4	964.7	220	265.6	280.0
45	894.8	939.9	225	255.1	268.9
50	868.5	912.2	230	243.7	257.1
55	839.8	882.2	235	232.2	245.0
60	809.2	850.0	240	221.1	233.4
65	776.8	816.0	245	211.1	223.0
70	742.6	780.1	250	202.9	214.5
75	706.5	742.2	255	197.5	208.8
80	668.4	702.3	260	195.8	207.0
85	628.1	660.0	265	198.8	210.2
90	585.6	615.3	270	207.4	219.2
95	540.7	568.2	275	222.2	234.6
100	493.6	518.8	280	243.4	256.8
105	444.6	467.4	285	271.0	285.6
110	394.1	414.5	290	304.5	320.7
115	342.9	360.9	295	343.4	361.4
120	291.9	307.5	300	387.1	407.1
125	242.5	255.8	305	434.6	457.0
130	196.7	207.9	310	485.2	510.1
135	157.5	167.2	315	537.9	565.3
140	130.1	138.8	320	591.5	621.6
145	120.1	128.5	325	645.2	677.9
150	128.6	137.2	330	697.7	733.0
155	149.2	158.5	335	748.0	785.8
160	174.7	185.0	340	795.1	835.2
165	200.6	212.0	345	838.0	880.2
170	224.6	237.0	350	875.9	920.0
175	245.3	258.7	355	908.1	953.8

Fields in mV/m @ 1 Kilometer

FIGURE 18



PROPOSED 1000 MV/M
DAYTIME AND NIGHTTIME CONTOURS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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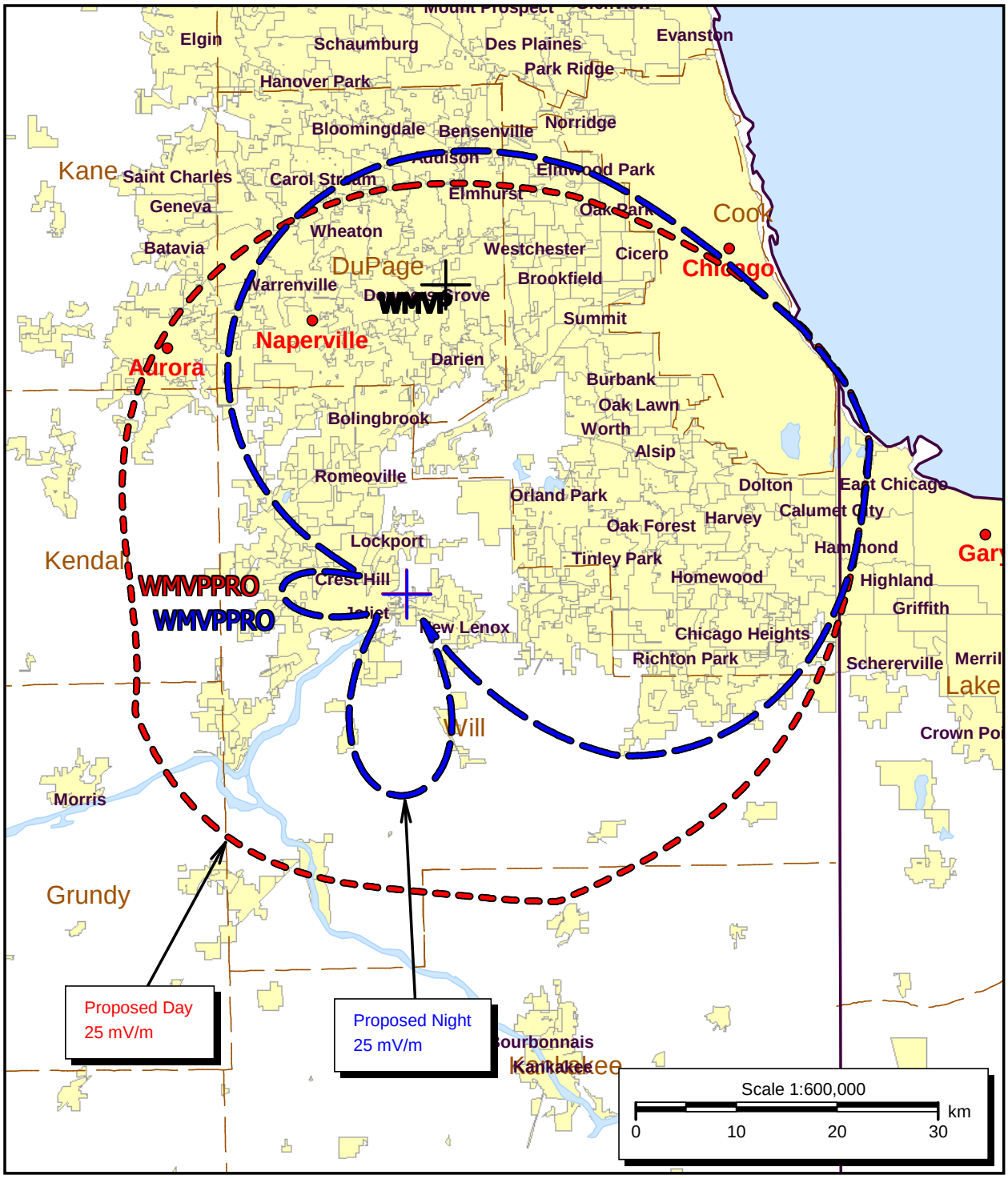
FIGURE 19



PROPOSED 25 MV/M
DAYTIME AND NIGHTTIME CONTOURS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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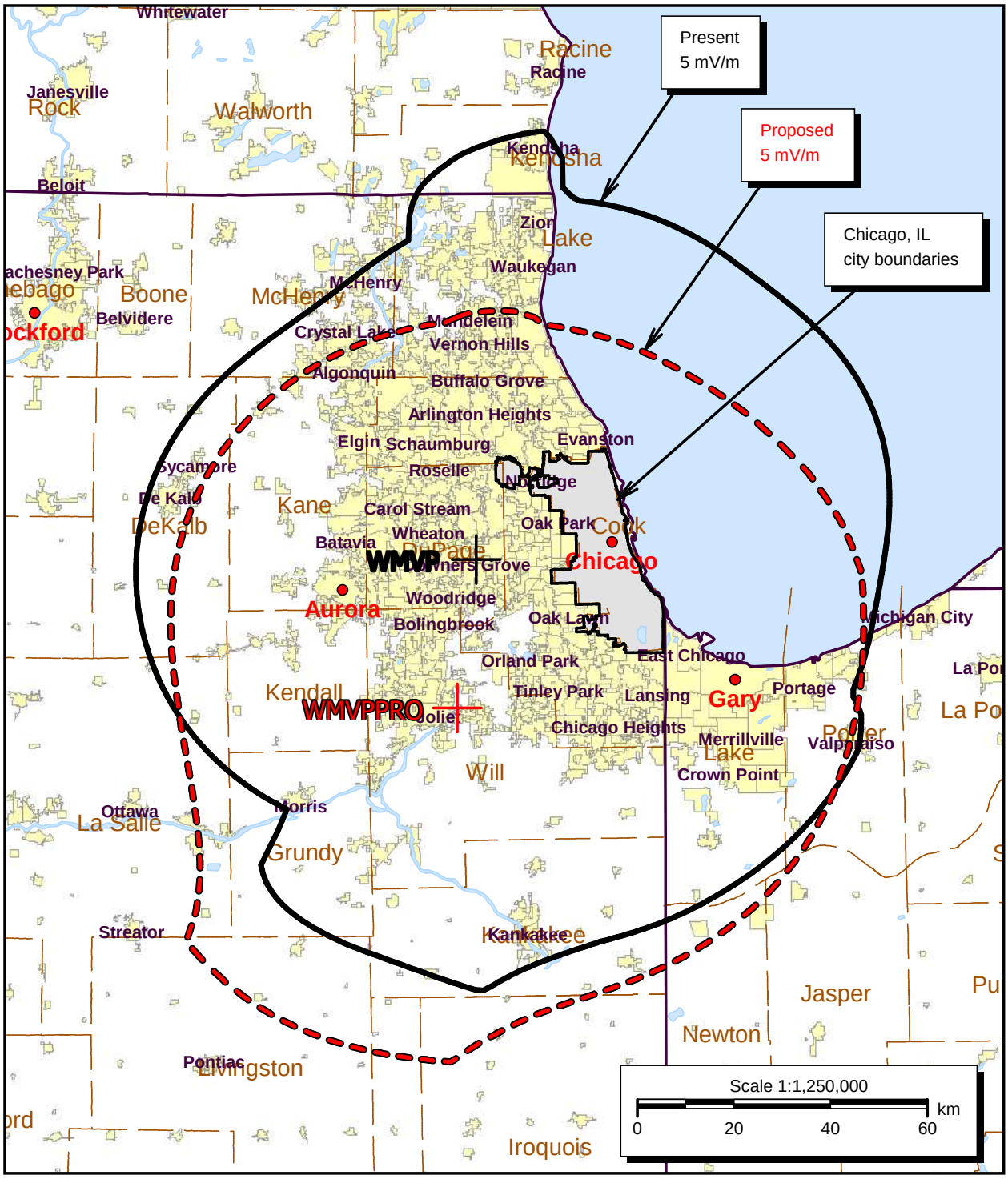
FIGURE 20



PRESENT AND PROPOSED 5.0 MV/M
DAYTIME COVERAGE CONTOURS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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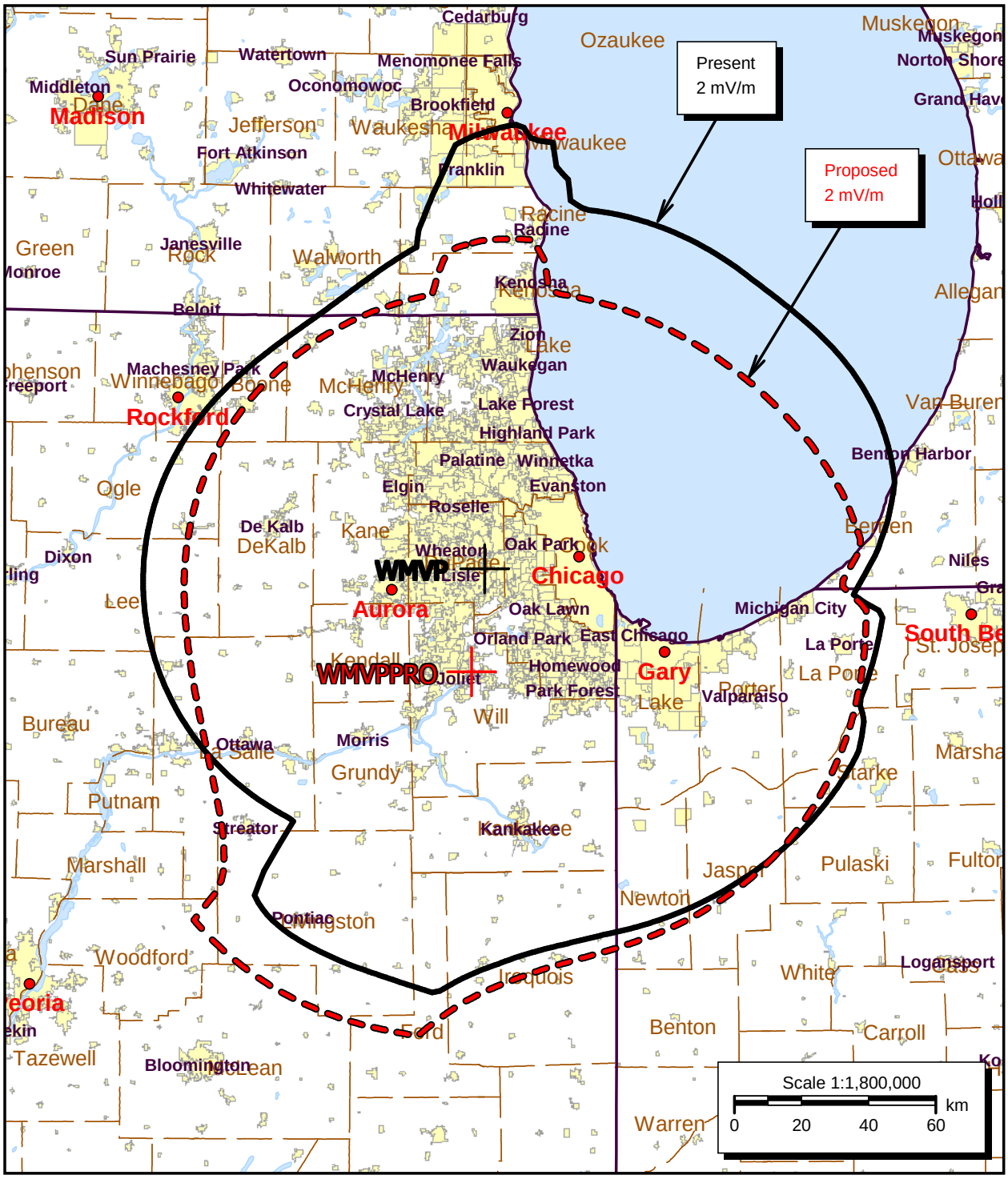
FIGURE 21



PRESENT AND PROPOSED 2.0 MV/M
DAYTIME COVERAGE CONTOURS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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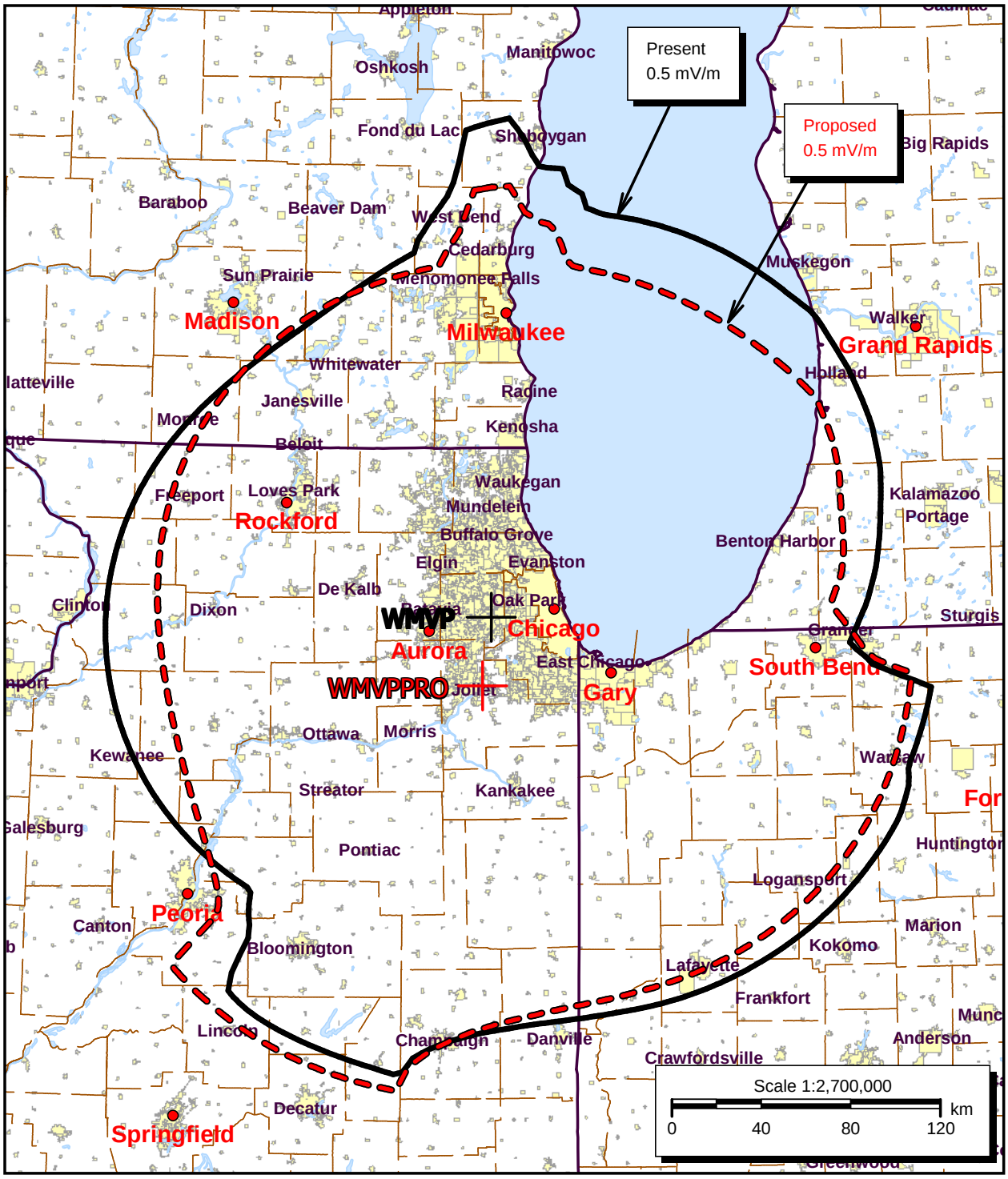
FIGURE 22



PRESENT AND PROPOSED 0.5 MV/M
DAYTIME COVERAGE CONTOURS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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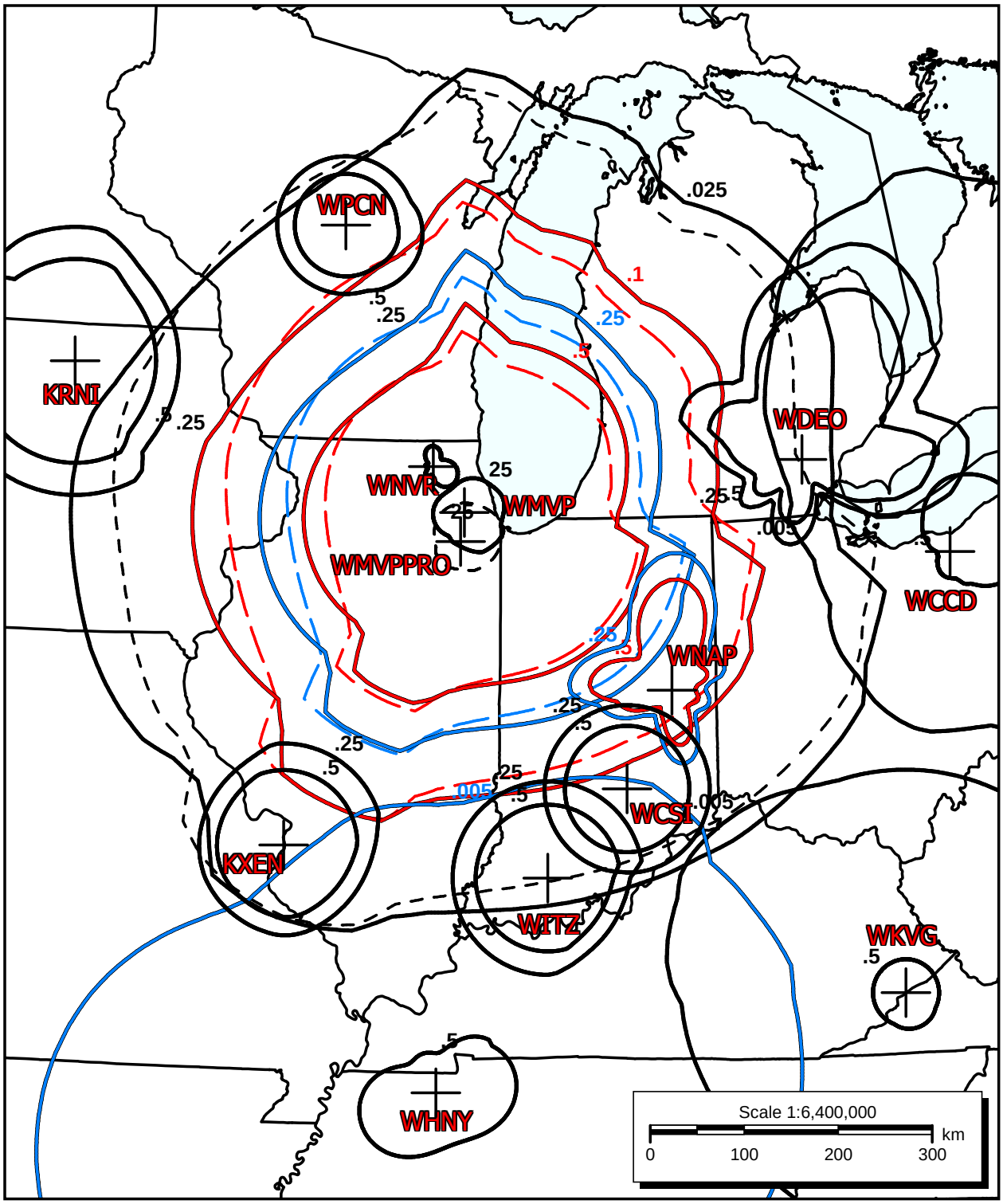
FIGURE 23



DAYTIME ALLOCATION STUDY
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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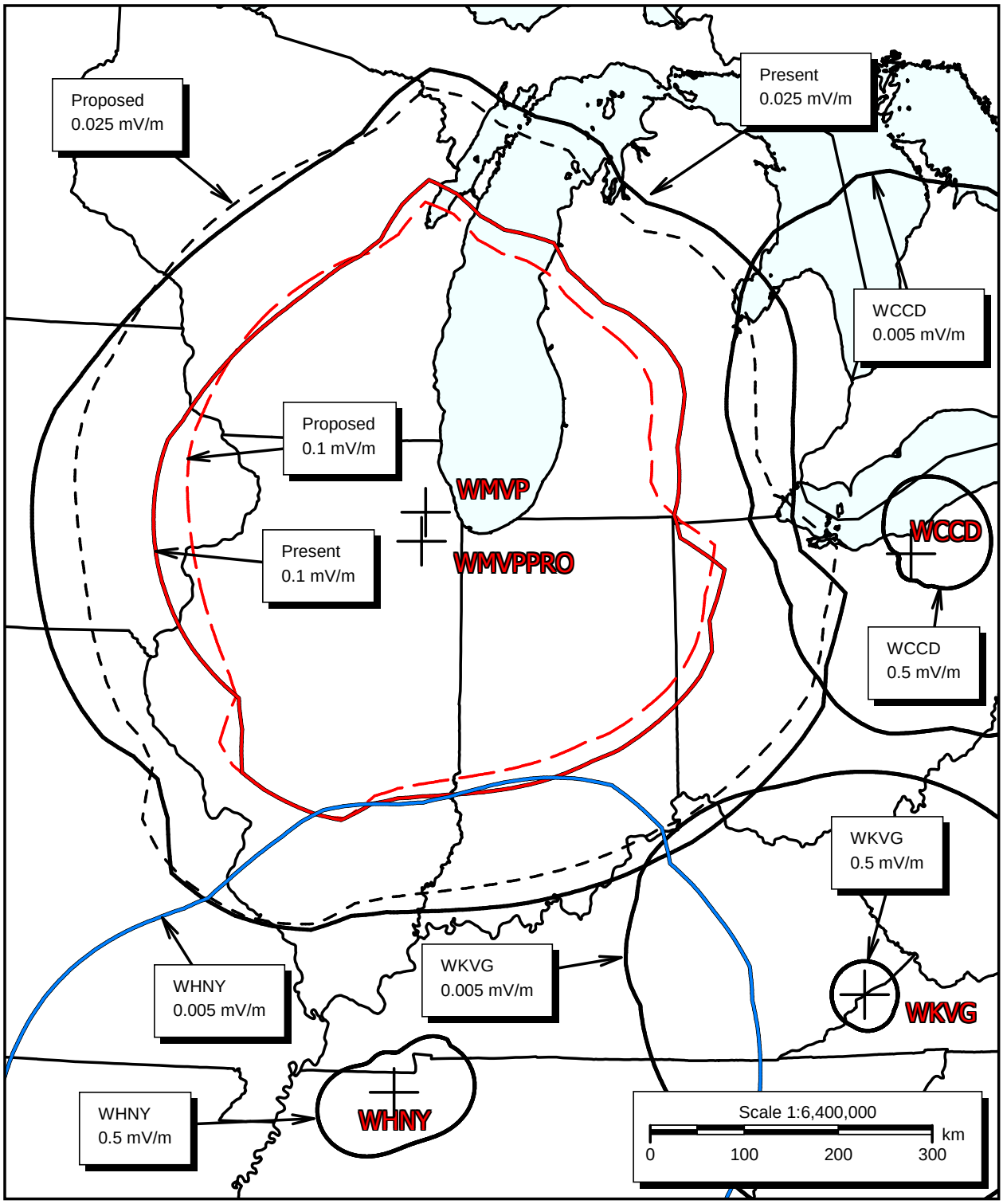
FIGURE 23A



DAYTIME ALLOCATION STUDY
CO-CHANNEL STATIONS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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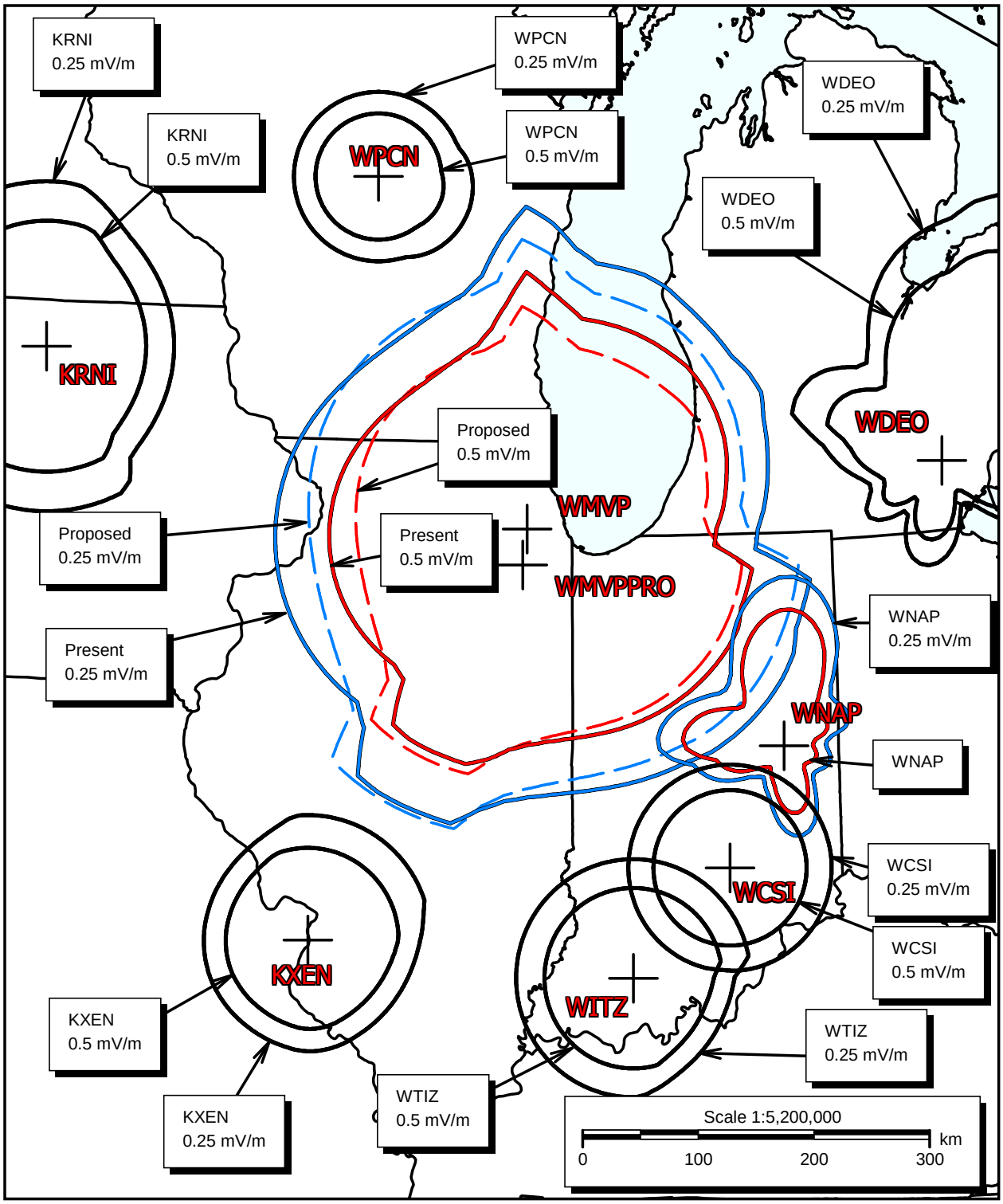
FIGURE 23B



DAYTIME ALLOCATION STUDY
FIRST-ADJACENT CHANNEL STATIONS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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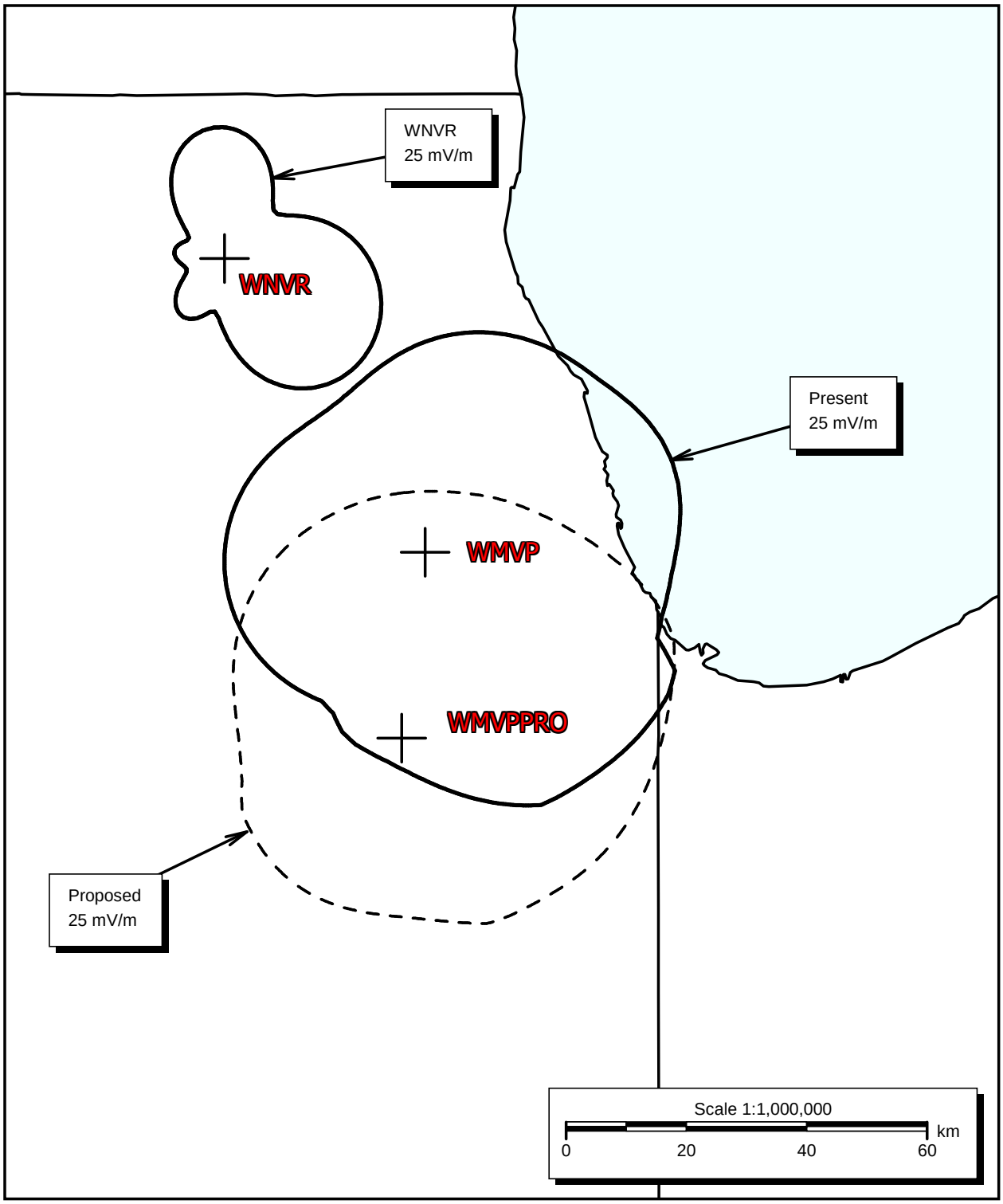
FIGURE 23C



DAYTIME ALLOCATION STUDY
THIRD-ADJACENT CHANNEL STATIONS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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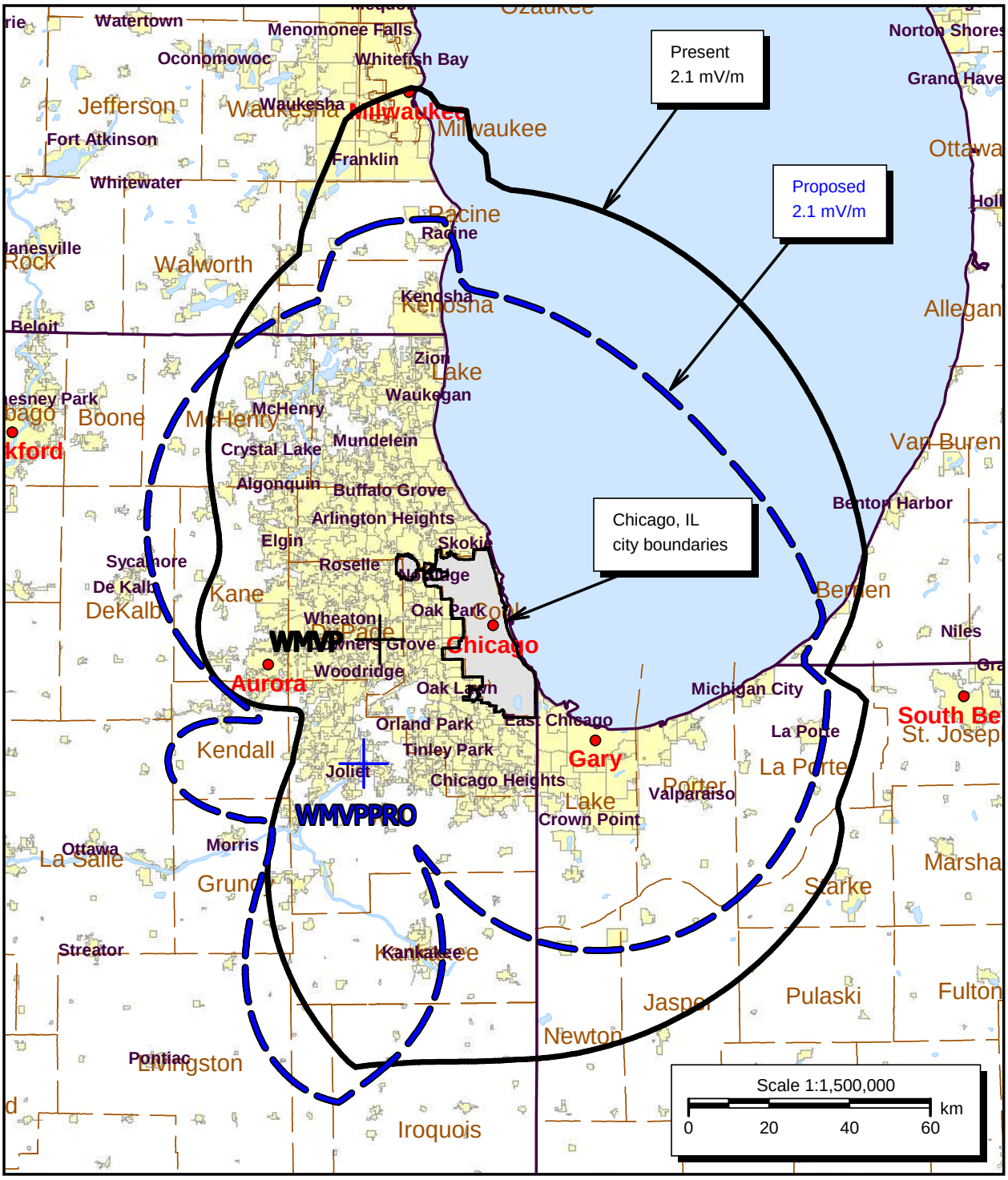
FIGURE 24



PRESENT AND PROPOSED NIGHTTIME
INTERFERENCE-FREE CONTOURS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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FIGURE 25

PRESENT AND PROPOSED 5.0 MV/M
NIGHTTIME COVERAGE CONTOURS
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

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Night Allocation Protection Report

Call: WMVPPRO
Freq: 1000 kHz
CHICAGO, IL, US
Hours: N
Lat: 41-32-29 N
Lng: 088-02-03 W
Power: 37.0 kW
Theo RMS: 2015.32 mV/m @ 1km @ 37.0 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.349	-102.0	113.7	36.9	106.1	0	0	0.0	0.0	0.0	0.0
2	0.754	-227.6	200.7	37.2	106.1	0	0	0.0	0.0	0.0	0.0
3	1.000	0.0	0.0	0.0	106.1	0	0	0.0	0.0	0.0	0.0
4	0.283	-2.6	241.5	98.5	106.1	0	0	0.0	0.0	0.0	0.0

Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
WMIN	US	MN	SAUK RAPIDS	65.60	1.543	1176.31	1170.27	6.04
50% = 5.577, 25% = 6.173; NEW THUNDER BAY/A=4.69 CBR/ =3.02 CFRB/A=2.65								
WMIN	US	MN	SAUK RAPIDS	65.60	1.543	1176.31	1170.27	6.04
50% = 5.577, 25% = 6.173; NEW THUNDER BAY/A=4.69 CBR/ =3.02 CFRB/A=2.65								
KNWN (0)	US	WA	SEATTLE	3.04	1.477	2427.67g	310.26	2117.41
KNWN (5)	US	WA	SEATTLE	3.08	0.920	1490.75g	311.30	1179.45
KNWN (10)	US	WA	SEATTLE	3.13	0.831	1327.87s	312.30	1015.57
KNWN (15)	US	WA	SEATTLE	3.18	0.896	1409.87s	313.15	1096.72
KNWN (20)	US	WA	SEATTLE	3.23	0.977	1513.89s	314.56	1199.33
KNWN (25)	US	WA	SEATTLE	3.28	1.039	1583.56s	316.22	1267.33
KNWN (30)	US	WA	SEATTLE	3.34	1.070	1599.55s	317.88	1281.67
KNWN (35)	US	WA	SEATTLE	3.41	1.057	1548.68s	319.90	1228.78
KNWN (40)	US	WA	SEATTLE	3.49	1.038	1485.40s	322.32	1163.08
KNWN (45)	US	WA	SEATTLE	3.59	1.016	1414.44s	325.21	1089.23
KNWN (50)	US	WA	SEATTLE	3.72	1.010	1358.78s	329.28	1029.50
KNWN (55)	US	WA	SEATTLE	3.88	0.930	1197.76s	334.79	862.97
KNWN (60)	US	WA	SEATTLE	4.12	0.745	904.67s	343.00	561.68
KNWN (65)	US	WA	SEATTLE	4.44	0.500	563.34S	348.20	215.14
KNWN (70)	US	WA	SEATTLE	3.60	0.500	694.75S	198.65	496.09
KNWN (75)	US	WA	SEATTLE	3.58	0.500	697.41S	190.68	506.74
KNWN (80)	US	WA	SEATTLE	3.56	0.500	702.80S	184.25	518.54

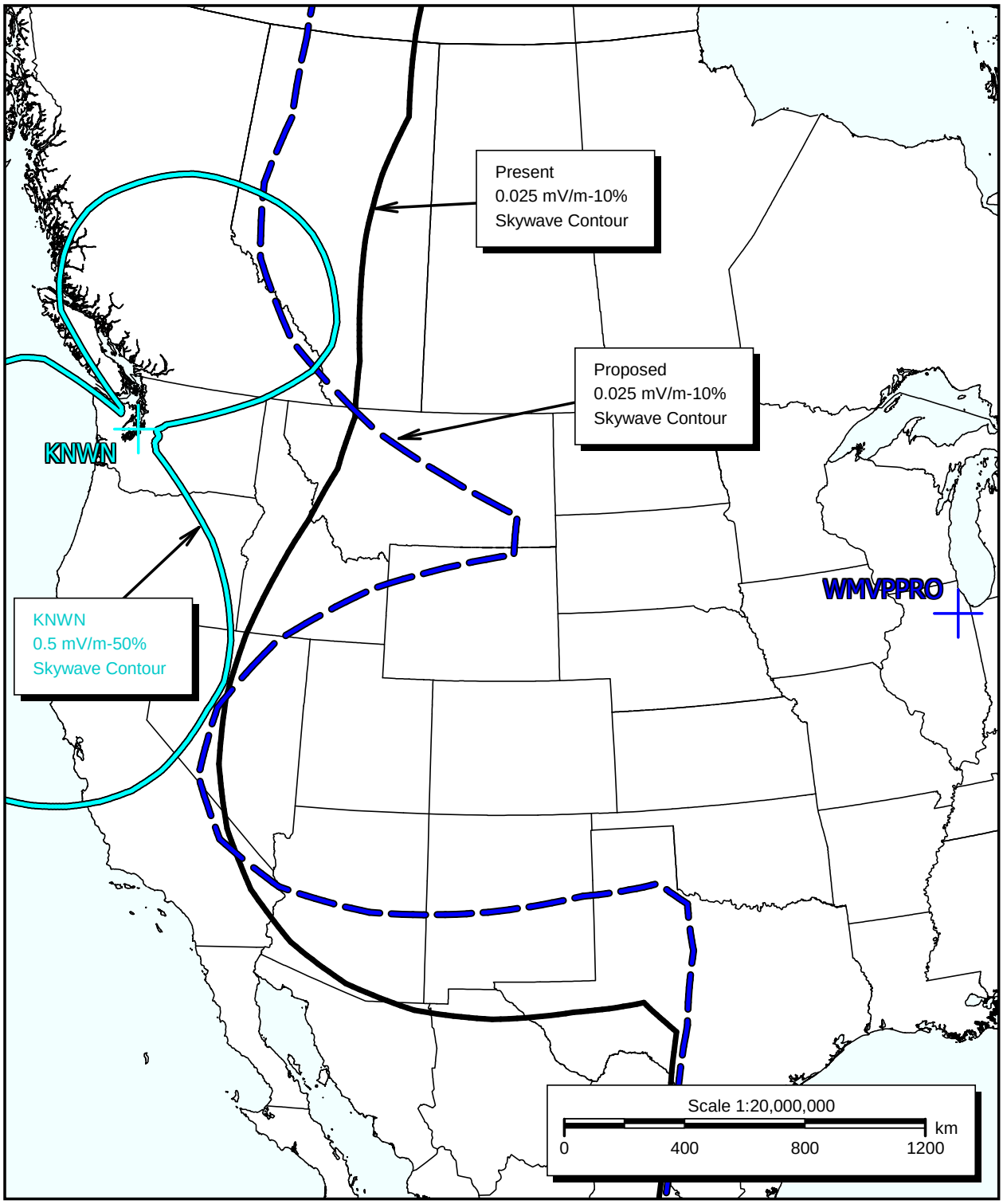
Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
KNWN (85)	US	WA	SEATTLE	3.56	0.500	703.11S	180.42	522.69
KNWN (90)	US	WA	SEATTLE	3.58	0.500	698.64S	177.26	521.37
KNWN (95)	US	WA	SEATTLE	3.61	0.500	692.85S	173.73	519.12
KNWN (100)	US	WA	SEATTLE	3.63	0.500	689.16S	170.02	519.14
KNWN (105)	US	WA	SEATTLE	3.63	0.500	688.59S	166.78	521.82
KNWN (110)	US	WA	SEATTLE	3.63	0.500	689.07S	163.98	525.09
KNWN (115)	US	WA	SEATTLE	3.63	0.500	688.77S	161.20	527.57
KNWN (120)	US	WA	SEATTLE	3.65	0.500	685.85S	157.69	528.16
KNWN (125)	US	WA	SEATTLE	3.68	0.500	678.89S	152.72	526.18
KNWN (130)	US	WA	SEATTLE	3.72	0.500	671.17S	147.34	523.83
KNWN (135)	US	WA	SEATTLE	5.20	0.500	480.44S	195.51	284.93
KNWN (140)	US	WA	SEATTLE	5.88	0.500	425.25S	276.82	148.43
KNWN (145)	US	WA	SEATTLE	6.33	0.500	394.79S	340.67	54.12
KNWN (150)	US	WA	SEATTLE	6.46	0.500	386.86S	374.67	12.18
KNWN (155)	US	WA	SEATTLE	6.30	0.500	396.94S	387.02	9.91
KNWN (160)	US	WA	SEATTLE	6.09	0.500	410.73S	393.25	17.48
KNWN (165)	US	WA	SEATTLE	5.79	0.500	431.48S	393.29	38.19
KNWN (170)	US	WA	SEATTLE	5.44	0.500	459.97S	391.45	68.51
KNWN (175)	US	WA	SEATTLE	5.06	0.500	494.13S	390.64	103.49
KNWN (180)	US	WA	SEATTLE	4.67	0.572	612.72s	393.80	218.91
KNWN (185)	US	WA	SEATTLE	4.32	0.696	806.28s	384.75	421.53
KNWN (190)	US	WA	SEATTLE	4.02	0.858	1066.06s	358.90	707.16
KNWN (195)	US	WA	SEATTLE	3.77	1.166	1547.39s	297.25	1250.14
KNWN (200)	US	WA	SEATTLE	3.59	1.297	1807.77s	259.96	1547.81
KNWN (205)	US	WA	SEATTLE	3.45	1.500	2177.55s	176.47	2001.08
KNWN (210)	US	WA	SEATTLE	3.36	1.350	2008.10s	149.95	1858.15
KNWN (215)	US	WA	SEATTLE	3.30	1.137	1722.73s	137.95	1584.78
KNWN (220)	US	WA	SEATTLE	3.25	0.948	1458.14s	133.86	1324.28
KNWN (225)	US	WA	SEATTLE	3.21	0.794	1237.89s	133.35	1104.54
KNWN (230)	US	WA	SEATTLE	3.17	0.684	1078.30s	135.10	943.21
KNWN (235)	US	WA	SEATTLE	3.14	0.602	957.90s	138.22	819.68
KNWN (240)	US	WA	SEATTLE	3.11	0.535	859.17s	141.97	717.20
KNWN (245)	US	WA	SEATTLE	3.08	0.500	810.59P	146.35	664.24
KNWN (250)	US	WA	SEATTLE	3.06	0.500	817.72P	151.24	666.48
KNWN (255)	US	WA	SEATTLE	3.03	0.500	824.70P	156.58	668.11
KNWN (260)	US	WA	SEATTLE	3.01	0.500	831.64P	162.37	669.27
KNWN (265)	US	WA	SEATTLE	2.98	0.500	839.02P	168.58	670.44
KNWN (270)	US	WA	SEATTLE	2.95	0.500	848.81P	175.34	673.47
KNWN (275)	US	WA	SEATTLE	2.91	0.500	859.50P	183.05	676.45
KNWN (280)	US	WA	SEATTLE	2.87	0.500	871.37P	191.96	679.41
KNWN (285)	US	WA	SEATTLE	2.83	0.500	884.85P	202.42	682.43
KNWN (290)	US	WA	SEATTLE	2.79	0.500	896.05P	213.89	682.16
KNWN (295)	US	WA	SEATTLE	2.75	0.500	907.86P	226.88	680.98
KNWN (300)	US	WA	SEATTLE	3.10	0.500	805.96S	200.30	605.65
KNWN (305)	US	WA	SEATTLE	3.09	0.500	808.94S	205.55	603.39
KNWN (310)	US	WA	SEATTLE	3.06	0.500	817.09S	213.88	603.21
KNWN (315)	US	WA	SEATTLE	2.96	0.500	843.62P	234.02	609.60

Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
KNWN (320)	US	WA	SEATTLE	2.99	0.511	852.69g	235.62	617.07
KNWN (325)	US	WA	SEATTLE	3.02	0.679	1124.61g	238.26	886.35
KNWN (330)	US	WA	SEATTLE	3.03	1.365	2255.40g	243.76	2011.64
KNWN (335)	US	WA	SEATTLE	2.97	2.162	3641.75g	265.99	3375.76
KNWN (340)	US	WA	SEATTLE	2.87	1.264	2203.93g	306.48	1897.46
KNWN (345)	US	WA	SEATTLE	2.91	6.699	11498.68g	307.38	11191.30
KNWN (350)	US	WA	SEATTLE	2.96	4.274	7228.52g	308.31	6920.21
KNWN (355)	US	WA	SEATTLE	3.00	2.431	4053.20g	309.26	3743.94
XEOY/O (0)	MX	DF	IZTACALCO	7.92	0.500	332.07E	315.76	16.31
XEOY/O (5)	MX	DF	IZTACALCO	8.09	0.500	355.66E	336.68	18.98
XEOY/O (10)	MX	DF	IZTACALCO	8.22	0.500	381.39E	358.98	22.41
XEOY/O (15)	MX	DF	IZTACALCO	8.30	0.500	408.93E	382.29	26.64
XEOY/O (20)	MX	DF	IZTACALCO	7.69	0.520	437.92E	406.71	31.22
XEOY/O (25)	MX	DF	IZTACALCO	6.90	0.548	464.10E	423.38	40.72
XEOY/O (30)	MX	DF	IZTACALCO	6.64	0.559	479.83E	435.55	44.27
XEOY/O (35)	MX	DF	IZTACALCO	6.57	0.559	496.57E	448.34	48.23
XEOY/O (40)	MX	DF	IZTACALCO	6.50	0.559	511.28E	460.56	50.71
XEOY/O (45)	MX	DF	IZTACALCO	6.26	0.563	517.28E	466.81	50.47
XEOY/O (50)	MX	DF	IZTACALCO	6.09	0.564	527.29E	474.03	53.26
XEOY/O (55)	MX	DF	IZTACALCO	5.98	0.564	539.85E	482.90	56.94
XEOY/O (60)	MX	DF	IZTACALCO	5.88	0.564	552.53E	491.62	60.91
XEOY/O (65)	MX	DF	IZTACALCO	5.77	0.564	566.48E	500.30	66.18
XEOY/O (70)	MX	DF	IZTACALCO	5.66	0.564	580.77E	509.08	71.69
XEOY/O (75)	MX	DF	IZTACALCO	5.56	0.564	594.71E	518.09	76.62
XEOY/O (80)	MX	DF	IZTACALCO	5.46	0.561	609.53E	527.44	82.09
XEOY/O (85)	MX	DF	IZTACALCO	5.34	0.560	625.60E	537.29	88.30
XEOY/O (90)	MX	DF	IZTACALCO	5.22	0.555	644.17E	547.89	96.28
XEOY/O (95)	MX	DF	IZTACALCO	5.09	0.549	666.46E	559.46	107.00
XEOY/O (100)	MX	DF	IZTACALCO	4.96	0.512	756.47E	605.63	150.83
XEOY/O (105)	MX	DF	IZTACALCO	4.77	0.500	784.17E	618.17	166.00
XEOY/O (110)	MX	DF	IZTACALCO	4.58	0.500	780.52E	616.37	164.16
XEOY/O (115)	MX	DF	IZTACALCO	4.40	0.500	773.67E	613.34	160.34
XEOY/O (120)	MX	DF	IZTACALCO	4.23	0.500	765.26E	609.12	156.14
XEOY/O (125)	MX	DF	IZTACALCO	4.08	0.500	753.62E	603.75	149.87
XEOY/O (130)	MX	DF	IZTACALCO	3.95	0.500	740.58E	597.25	143.33
XEOY/O (135)	MX	DF	IZTACALCO	3.82	0.500	725.67E	589.64	136.03
XEOY/O (140)	MX	DF	IZTACALCO	3.71	0.500	708.48E	580.95	127.53
XEOY/O (145)	MX	DF	IZTACALCO	3.61	0.500	692.37S	571.22	121.14
XEOY/O (150)	MX	DF	IZTACALCO	3.58	0.510	711.69s	552.77	158.92
XEOY/O (155)	MX	DF	IZTACALCO	3.58	0.521	727.38s	533.58	193.81
XEOY/O (160)	MX	DF	IZTACALCO	3.58	0.531	742.06s	516.39	225.67
XEOY/O (165)	MX	DF	IZTACALCO	3.58	0.539	753.16s	500.30	252.86
XEOY/O (170)	MX	DF	IZTACALCO	3.59	0.546	760.37s	484.61	275.76
XEOY/O (175)	MX	DF	IZTACALCO	3.60	0.549	763.22s	470.41	292.81
XEOY/O (180)	MX	DF	IZTACALCO	3.61	0.554	767.65s	457.35	310.30
XEOY/O (185)	MX	DF	IZTACALCO	3.62	0.558	771.05s	445.15	325.90
XEOY/O (190)	MX	DF	IZTACALCO	3.62	0.559	771.23s	433.58	337.65

Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
XEOY/O (195)	MX	DF	IZTACALCO	3.63	0.560	772.08s	422.45	349.63
XEOY/O (200)	MX	DF	IZTACALCO	3.63	0.560	770.77s	411.59	359.18
XEOY/O (205)	MX	DF	IZTACALCO	3.64	0.561	770.84s	400.85	369.99
XEOY/O (210)	MX	DF	IZTACALCO	3.64	0.560	769.01s	390.09	378.92
XEOY/O (215)	MX	DF	IZTACALCO	3.64	0.560	768.44s	379.16	389.28
XEOY/O (220)	MX	DF	IZTACALCO	3.65	0.558	765.49s	367.90	397.59
XEOY/O (225)	MX	DF	IZTACALCO	3.65	0.556	761.26s	356.14	405.12
XEOY/O (230)	MX	DF	IZTACALCO	3.65	0.552	756.47s	343.68	412.78
XEOY/O (235)	MX	DF	IZTACALCO	3.68	0.551	748.36s	332.78	415.58
XEOY/O (240)	MX	DF	IZTACALCO	3.73	0.550	737.54s	322.84	414.71
XEOY/O (245)	MX	DF	IZTACALCO	3.71	0.543	731.88s	305.72	426.16
XEOY/O (250)	MX	DF	IZTACALCO	3.68	0.529	717.93s	285.44	432.49
XEOY/O (255)	MX	DF	IZTACALCO	3.64	0.509	698.43s	261.04	437.39
XEOY/O (260)	MX	DF	IZTACALCO	3.69	0.500	677.57S	244.67	432.90
XEOY/O (265)	MX	DF	IZTACALCO	3.80	0.500	658.26S	236.06	422.20
XEOY/O (270)	MX	DF	IZTACALCO	3.92	0.500	638.24S	228.51	409.72
XEOY/O (275)	MX	DF	IZTACALCO	4.05	0.500	616.77S	222.04	394.73
XEOY/O (280)	MX	DF	IZTACALCO	4.20	0.500	595.24S	216.65	378.60
XEOY/O (285)	MX	DF	IZTACALCO	4.36	0.500	573.17S	212.35	360.81
XEOY/O (290)	MX	DF	IZTACALCO	4.54	0.500	551.15S	209.17	341.98
XEOY/O (295)	MX	DF	IZTACALCO	4.72	0.500	529.44S	207.13	322.31
XEOY/O (300)	MX	DF	IZTACALCO	4.92	0.500	508.08S	206.26	301.82
XEOY/O (305)	MX	DF	IZTACALCO	5.13	0.500	487.13S	206.60	280.53
XEOY/O (310)	MX	DF	IZTACALCO	5.38	0.500	464.60S	208.23	256.37
XEOY/O (315)	MX	DF	IZTACALCO	5.64	0.500	443.42S	211.21	232.20
XEOY/O (320)	MX	DF	IZTACALCO	5.93	0.500	421.62S	215.66	205.96
XEOY/O (325)	MX	DF	IZTACALCO	6.23	0.500	401.22S	221.68	179.54
XEOY/O (330)	MX	DF	IZTACALCO	6.50	0.500	384.57S	229.38	155.19
XEOY/O (335)	MX	DF	IZTACALCO	6.72	0.500	371.93S	238.89	133.04
XEOY/O (340)	MX	DF	IZTACALCO	6.93	0.500	360.54S	250.30	110.23
XEOY/O (345)	MX	DF	IZTACALCO	7.19	0.500	347.58S	263.71	83.87
XEOY/O (350)	MX	DF	IZTACALCO	7.46	0.500	334.91S	279.12	55.79
XEOY/O (355)	MX	DF	IZTACALCO	7.71	0.500	324.23S	296.51	27.72
KTOK	US	OK	OKLAHOMA CITY	36.38	1.054	144.90	96.17	48.73
50% = 2.652, 25% = 3.452; ZYK-522-A=2.25 HOK 36-A=1.40 XEGQ/A=1.08 WMVP=1.05 HCAW2-A=0.98 YVNM-A=0.97 XELEOG/A=0.84								
WDEO	US	MI	YPSILANTI	154.90	10.837	3497.89	2725.24	772.65
50% = 13.597, 25% = 15.108; WMVP=10.84 CBW/A=8.21 WDCX=5.39 WONE=3.79								
XENLT/O	MX	TA	NUEVO LAREDO	12.63	2.532	1002.56	211.47	791.09
50% = 5.064, 25% = 5.697; XEGQ/A=3.84 XELEOG/A=3.30 XEMMS/A=2.17 XEHPC/A=1.46								
XEFV/A	MX	CH	CD.JUAREZ	10.92	2.002	917.08	111.00	806.08
50% = 4.005, 25% = 5.525; KTOK=3.00 KNWN=2.65 XEMMS/A=1.87 KCEO=1.85 XEGQ/A=1.72 XEHPC/A=1.56 XELEOG/A=1.48								

Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
XEFV/O	MX	CH	CD.JUAREZ	10.92	2.002	917.08	111.00	806.08
50% = 4.005, 25% = 5.525; KTOK=3.00 KNWN=2.65 XEMMS/A=1.87 KCEO=1.85 XEGQ/A=1.72 XEHPC/A=1.56 XELEOG/A=1.48								
XEFV/O	MX	CH	CD.JUAREZ	10.92	2.002	917.08	111.00	806.08
50% = 4.005, 25% = 5.525; KTOK=3.00 KNWN=2.65 XEMMS/A=1.87 KCEO=1.85 XEGQ/A=1.72 XEHPC/A=1.56 XELEOG/A=1.48								
XEFV/O	MX	CH	CD.JUAREZ	10.92	2.002	917.08	111.00	806.08
50% = 4.005, 25% = 5.525; KTOK=3.00 KNWN=2.65 XEMMS/A=1.87 KCEO=1.85 XEGQ/A=1.72 XEHPC/A=1.56 XELEOG/A=1.48								

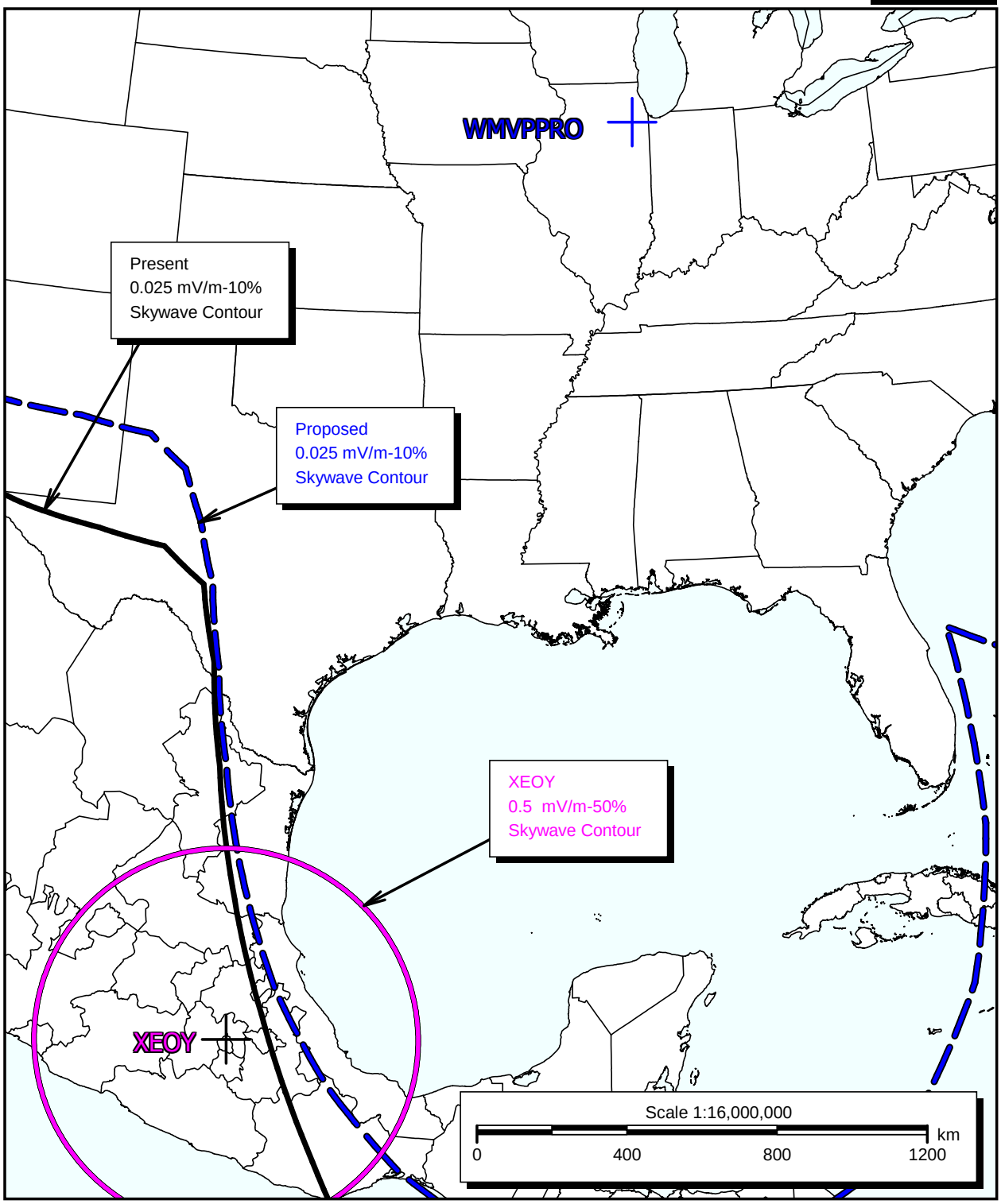
FIGURE 27



SKYWAVE STUDY
TO KNWN - SEATTLE, WASHINGTON
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

Consulting Engineers
CTJC
CARL T. JONES CORPORATION

FIGURE 28



SKYWAVE STUDY TO
XEOY - IZTACALCO, MEXICO
WMVP - CHICAGO, ILLINOIS
1000 KHZ - 50 KW DAY/37 KW NIGHT - DA-2
MARCH, 2023

Consulting Engineers
CTJC
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